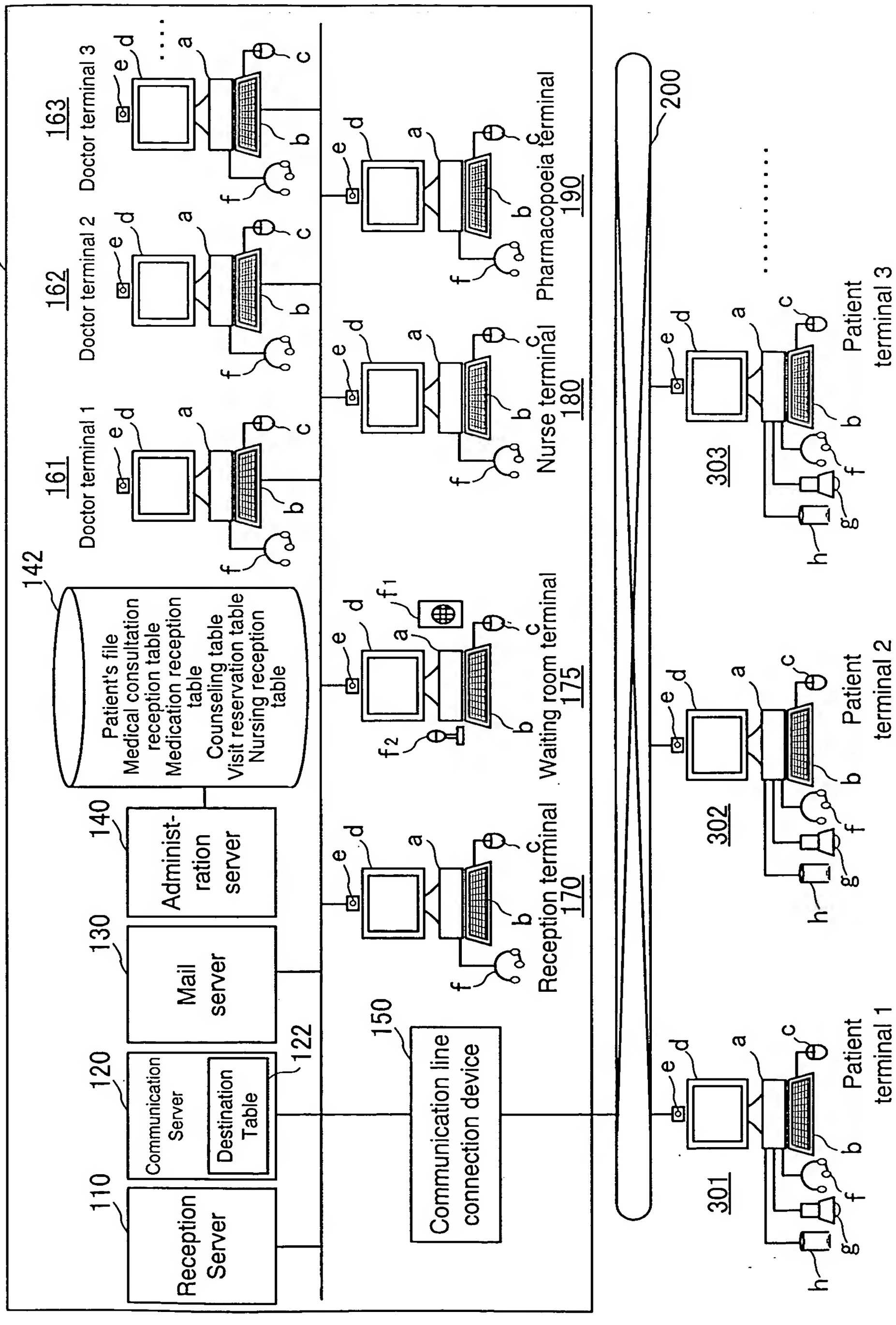
Fig. 1


100
Reception Server
110
Communication Server
120
Destination Table
122
Administ-ration server
140
142
Patient's file
Medical consultation reception table
Medication reception table
Counseling table
Visit reservation table
Nursing reception table
Mail server
130
Communication line connection device
150
Doctor terminal 1
161
Doctor terminal 2
162
Doctor terminal 3
163
Reception terminal
170
Waiting room terminal
175
Nurse terminal
180
Pharmacopoeia terminal
190
200
Patient terminal 1
301
Patient terminal 2
302
Patient terminal 3
303
a
b
c
d
e
f
g
h
f1
f2

DESTINATION TABLE IN THE COMMUNICATION SERVER

Kind of connection	Terminal Address					
Waiting room	Waiting room terminal	(Patient terminal)	(Patient terminal)	(Patient terminal)	(Patient terminal)	.....
Consultation room 1	(Doctor terminal 1)	(Patient terminal)				
Consultation room 2	(Doctor terminal 2)	(Patient terminal)				
Consultation room 3	(Doctor terminal 3)	(Patient terminal)				
Nursing room 1	(Patient terminal)	(Patient terminal)	(Patient terminal)	(Patient terminal)	(Patient terminal)	.....
Nursing room 2	(Patient terminal)	(Patient terminal)	(Patient terminal)	(Patient terminal)	(Patient terminal)	.....
Nursing room 3	(Patient terminal)	(Patient terminal)	(Patient terminal)	(Patient terminal)	(Patient terminal)	.....
Individual conversation room A	(Patient terminal)	(Patient terminal)				
Individual conversation room B	(Patient terminal)	(Nurse terminal)				
Individual conversation room C	(Patient terminal)	(Doctor terminal)				
Individual conversation room D	(Patient terminal)	(Waiting room terminal)				
Individual conversation room E	(Patient terminal)	(Reception terminal)				

Fig. 2

Keating & Bennett, LLP
38195.77
Nozomu SAHASHI
AT-HOME MEDICAL CONSULTATION...
Page 2 of 41

10/552781

Fig. 3

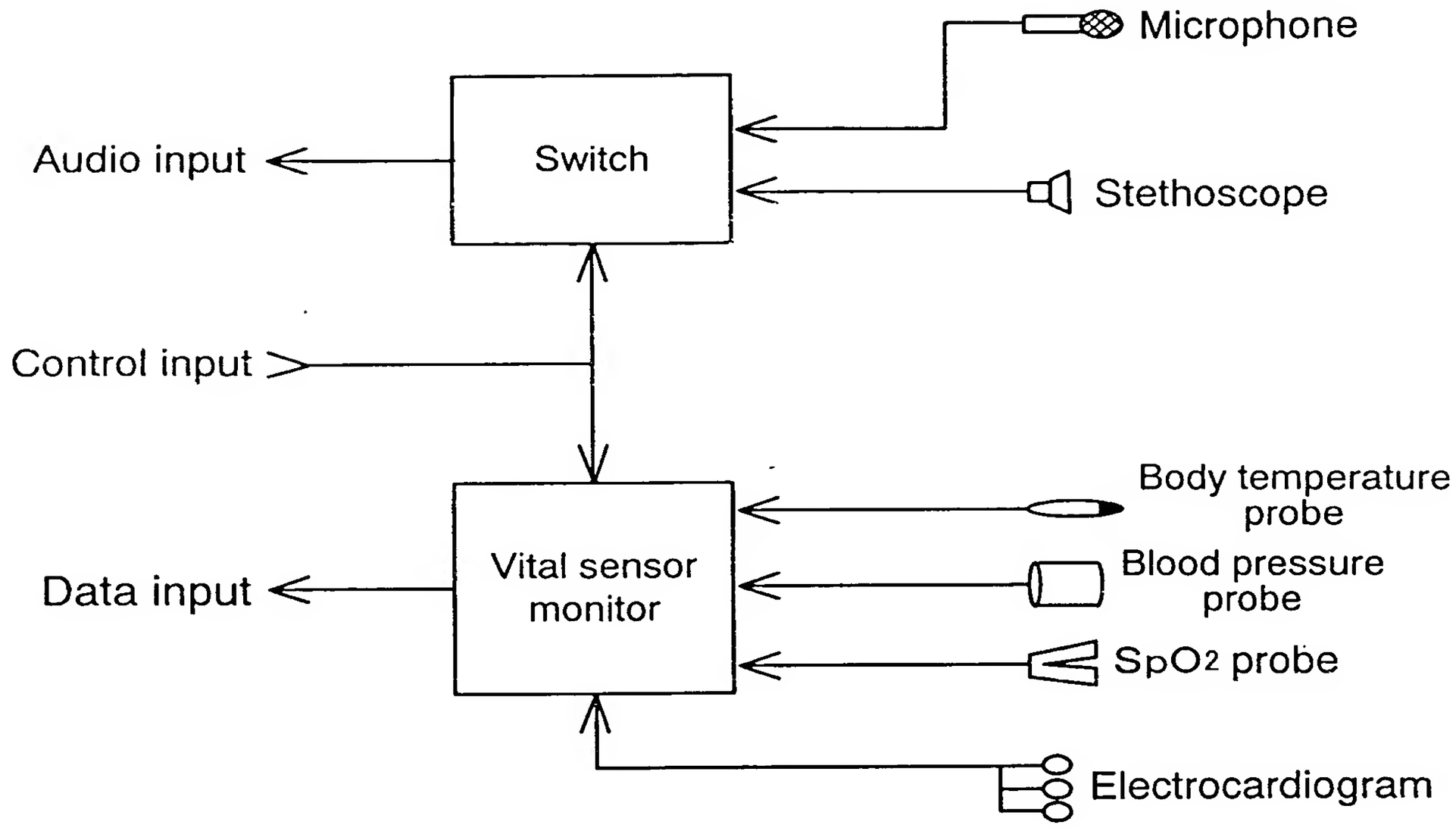
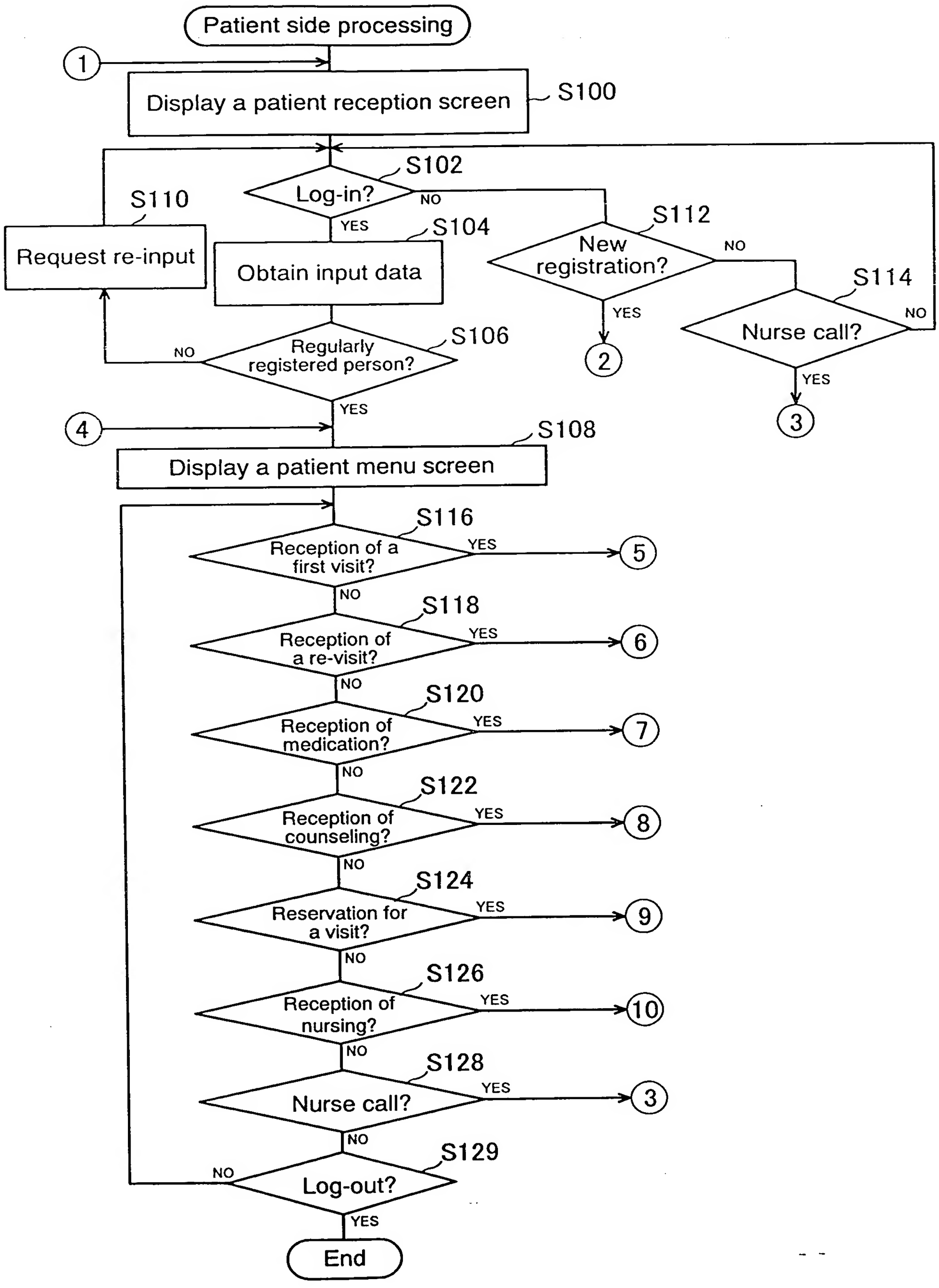

Microphone
Audio input
Switch
Stethoscope
Control input
Body temperature probe
Vital sensor monitor
Data input
Blood pressure probe
SpO2 probe
Electrocardiogram

Fig. 4


Patient side processing
1
Display a patient reception screen
S100
S102
Log-in?
NO
YES
S110
Request re-input
S104
Obtain input data
S112
New registration?
NO
YES
S114
Nurse call?
NO
YES
3
2
S106
Regularly registered person?
NO
YES
4
S108
Display a patient menu screen
S116
Reception of a first visit?
YES
5
NO
S118
Reception of a re-visit?
YES
6
NO
S120
Reception of medication?
YES
7
NO
S122
Reception of counseling?
YES
8
NO
S124
Reservation for a visit?
YES
9
NO
S126
Reception of nursing?
YES
10
NO
S128
Nurse call?
YES
3
NO
S129
Log-out?
NO
YES
End

10/552781

Fig. 5

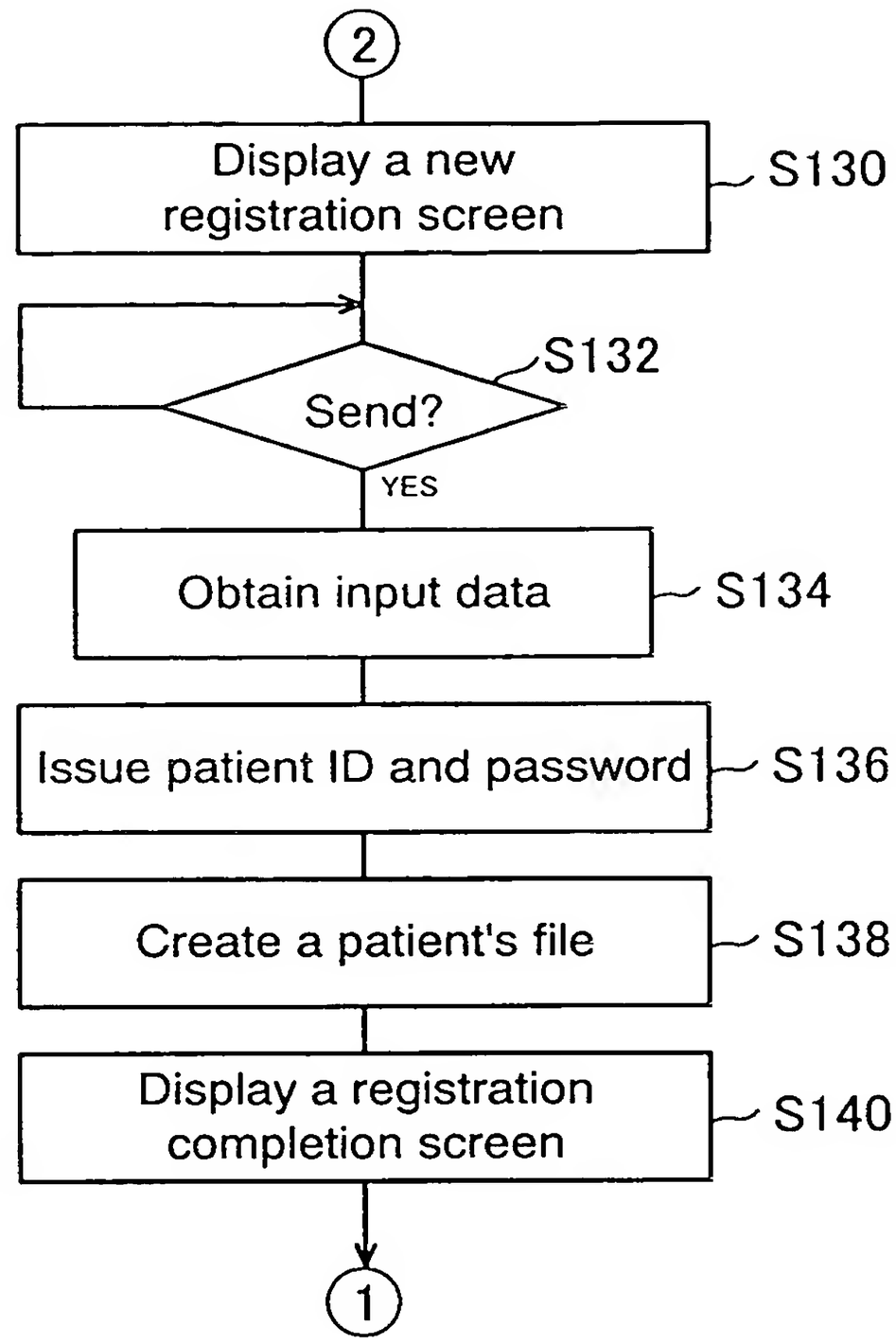


Fig. 6

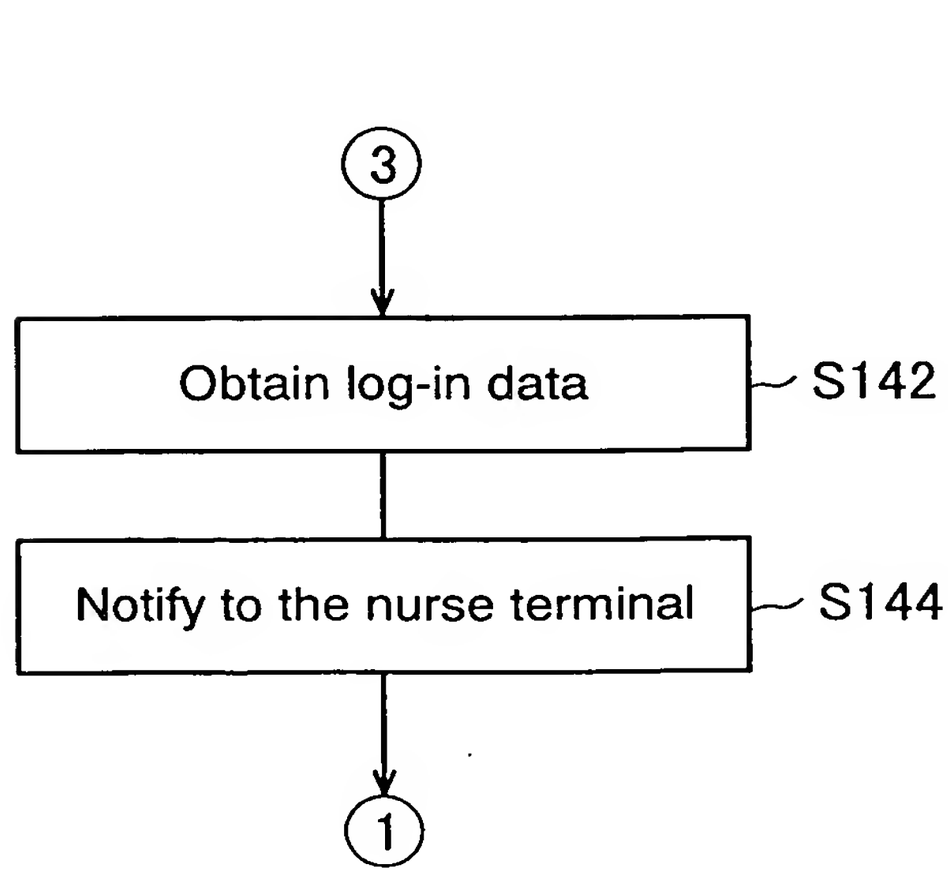


Fig. 7

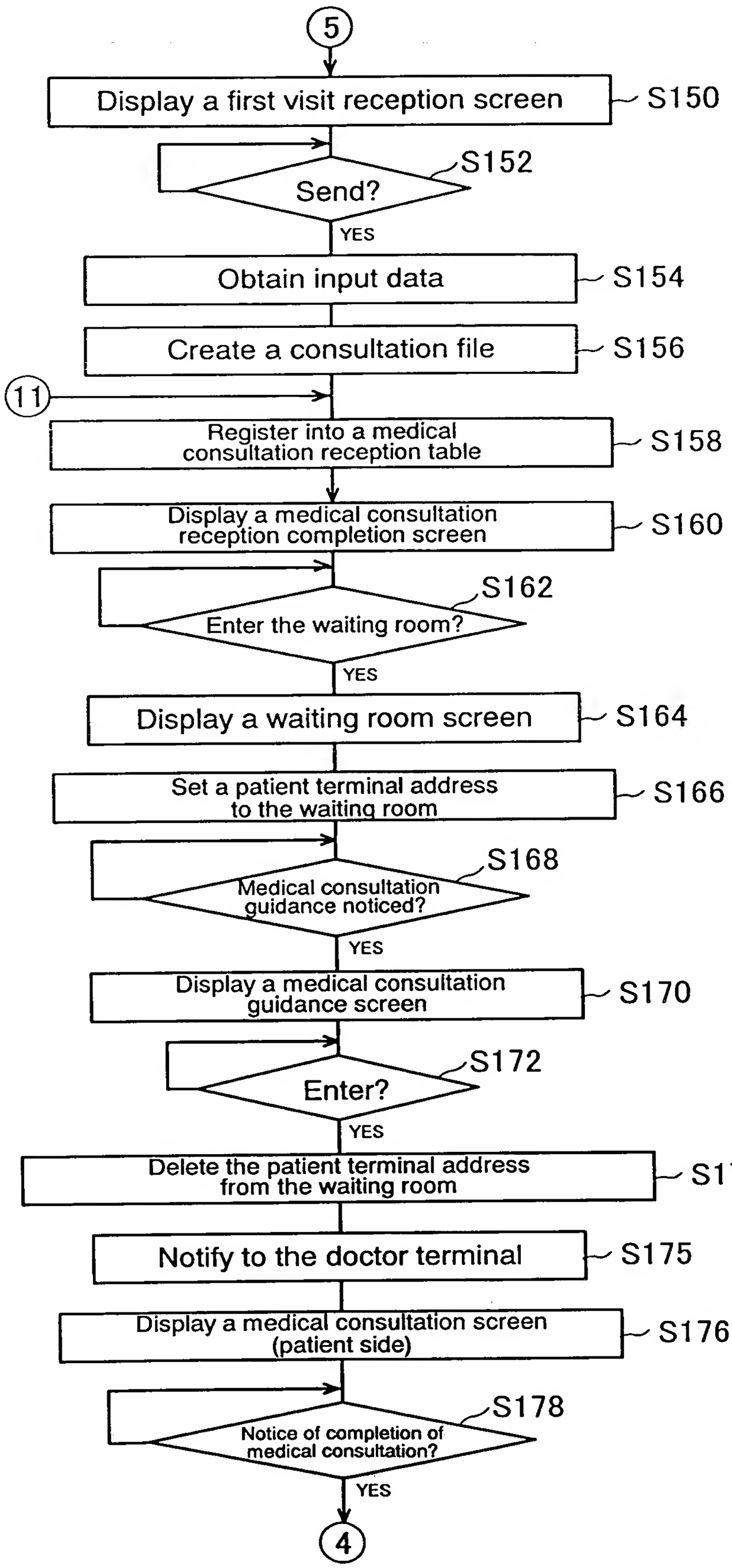

5
Display a first visit reception screen
S150
S152
Send?
YES
Obtain input data
S154
Create a consultation file
S156
11
Register into a medical consultation reception table
S158
Display a medical consultation reception completion screen
S160
S162
Enter the waiting room?
YES
Display a waiting room screen
S164
Set a patient terminal address to the waiting room
S166
S168
Medical consultation guidance noticed?
YES
Display a medical consultation guidance screen
S170
S172
Enter?
YES
Delete the patient terminal address from the waiting room
S174
Notify to the doctor terminal
S175
Display a medical consultation screen (patient side)
S176
S178
Notice of completion of medical consultation?
YES
4

Fig. 8

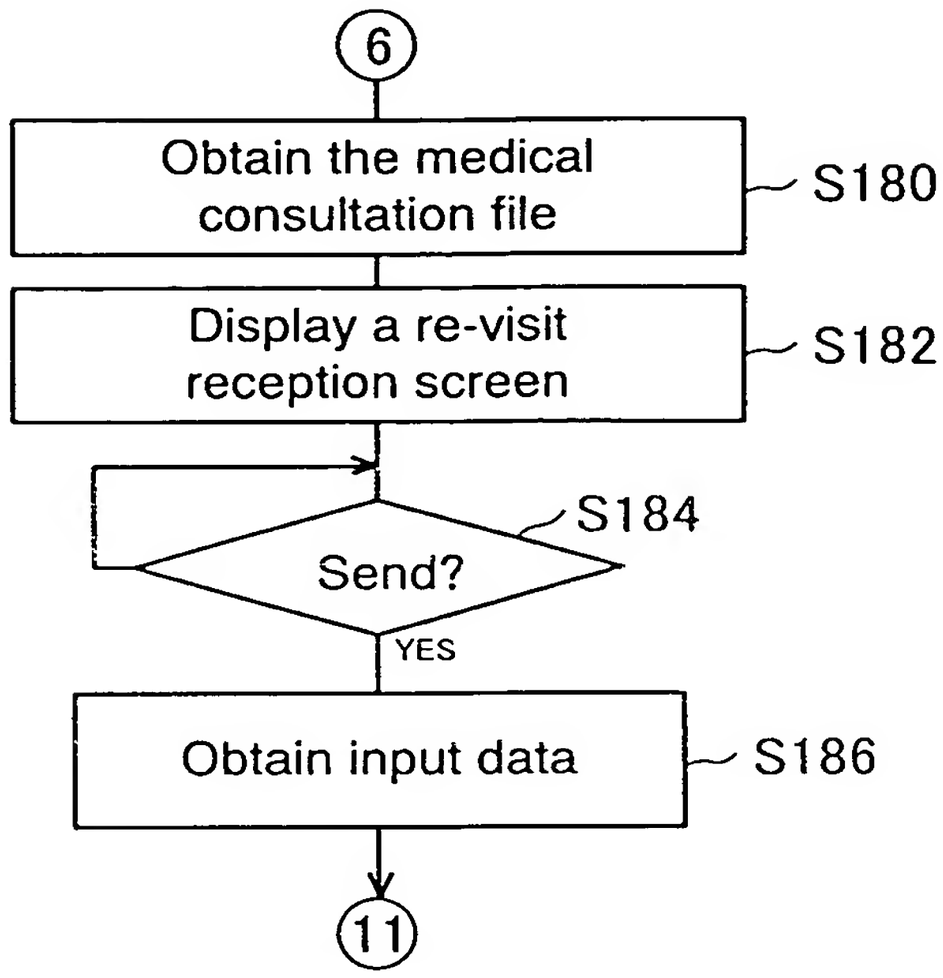
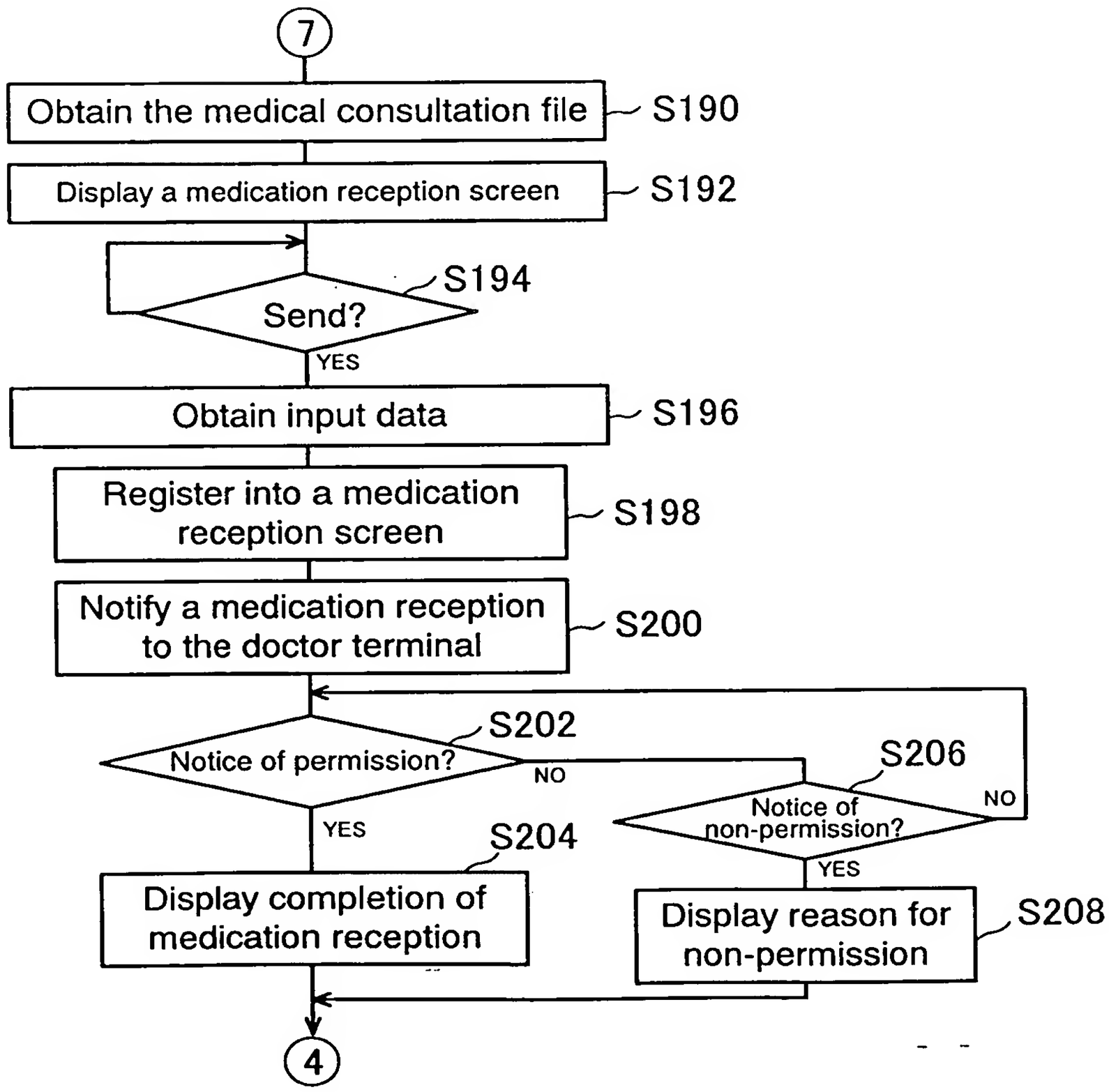
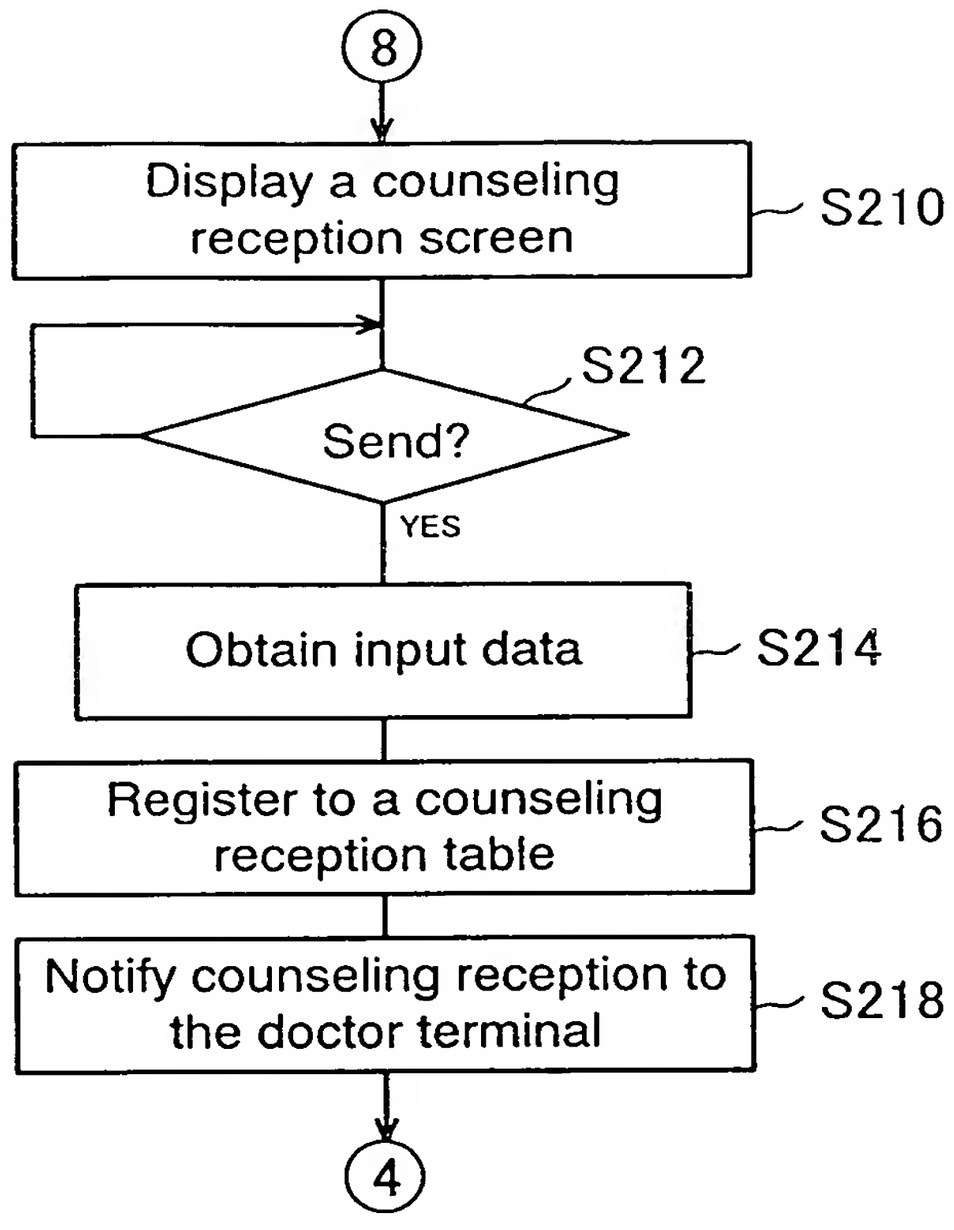

6
Obtain the medical consultation file
S180
Display a re-visit reception screen
S182
S184
Send?
YES
Obtain input data
S186
11

Fig. 9


7
Obtain the medical consultation file
S190
Display a medication reception screen
S192
S194
Send?
YES
Obtain input data
S196
Register into a medication reception screen
S198
Notify a medication reception to the doctor terminal
S200
S202
Notice of permission?
NO
YES
S204
Display completion of medication reception
S206
Notice of non-permission?
NO
YES
Display reason for non-permission
S208
4

10/552781

Fig. 10



10/552781

Fig. 11

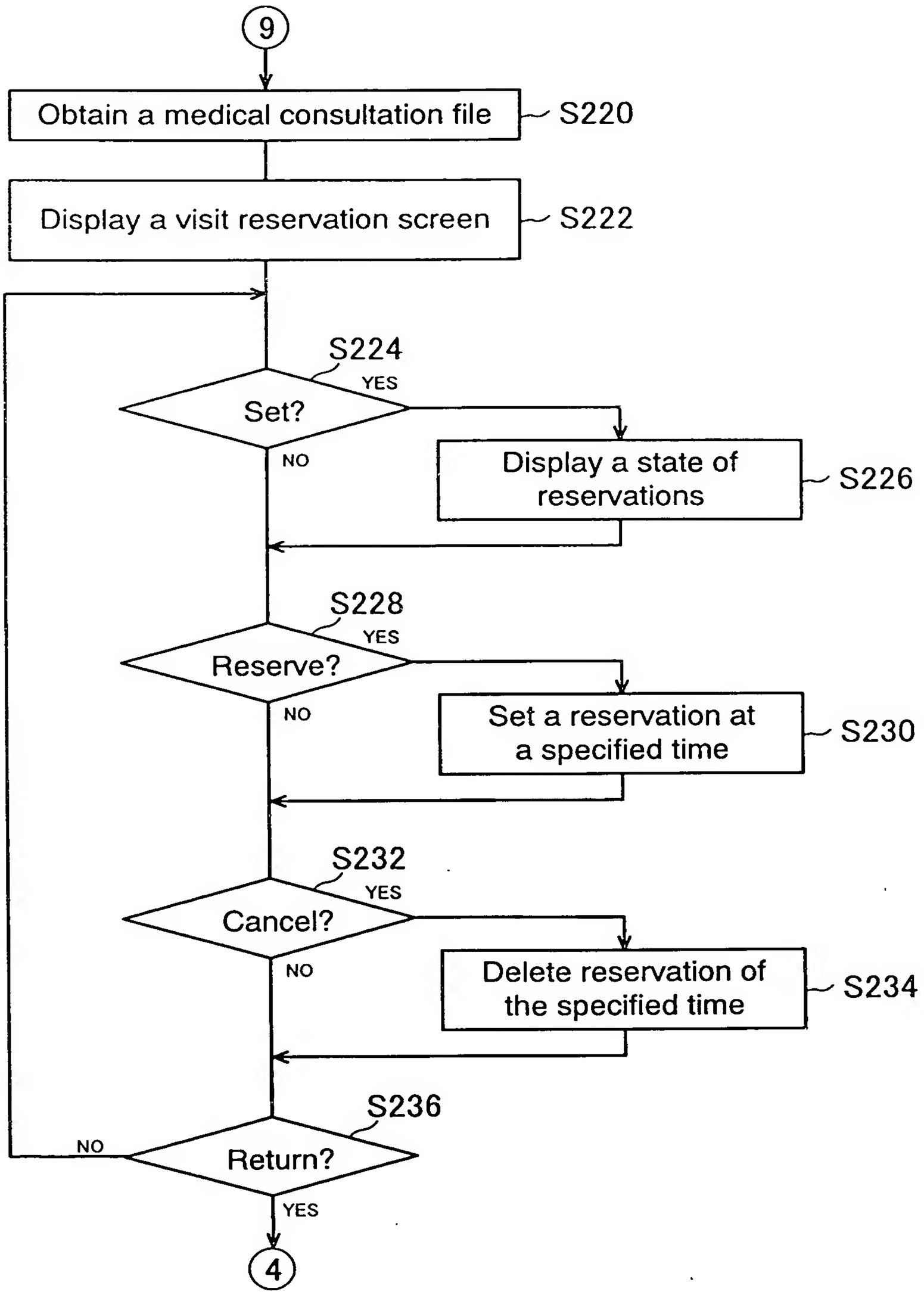


Fig. 12

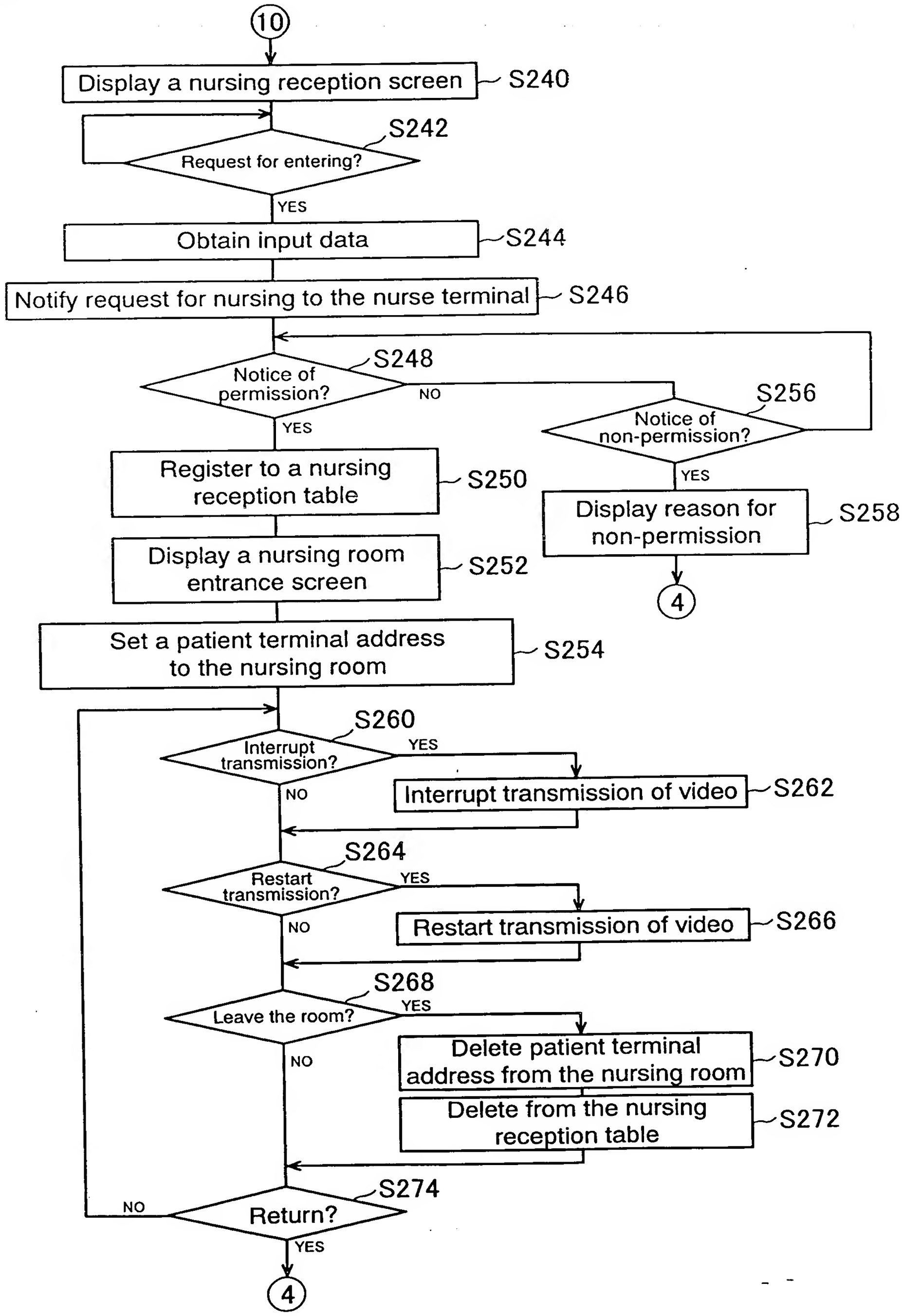
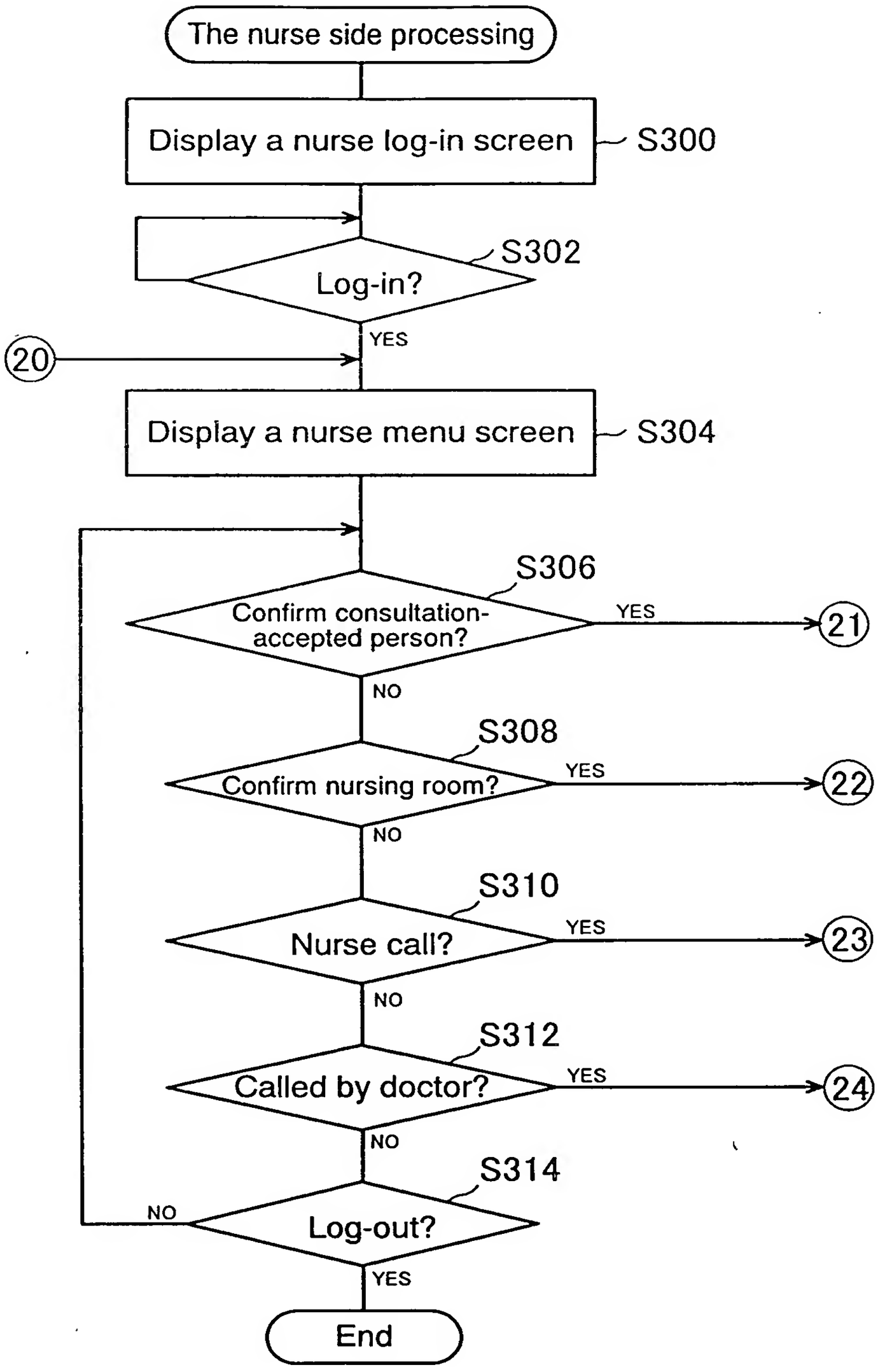

10
Display a nursing reception screen
S240
S242
Request for entering?
YES
Obtain input data
S244
Notify request for nursing to the nurse terminal
S246
S248
Notice of permission?
NO
YES
S256
Notice of non-permission?
YES
Register to a nursing reception table
S250
Display reason for non-permission
S258
Display a nursing room entrance screen
S252
4
Set a patient terminal address to the nursing room
S254
S260
Interrupt transmission?
YES
NO
Interrupt transmission of video
S262
S264
Restart transmission?
YES
NO
Restart transmission of video
S266
S268
Leave the room?
YES
NO
Delete patient terminal address from the nursing room
S270
Delete from the nursing reception table
S272
S274
Return?
NO
YES
4

Fig. 13


The nurse side processing
Display a nurse log-in screen
S300
S302
Log-in?
YES
20
Display a nurse menu screen
S304
S306
Confirm consultation-accepted person?
YES
21
NO
S308
Confirm nursing room?
YES
22
NO
S310
Nurse call?
YES
23
NO
S312
Called by doctor?
YES
24
NO
S314
Log-out?
NO
YES
End

10/552781

Fig. 14

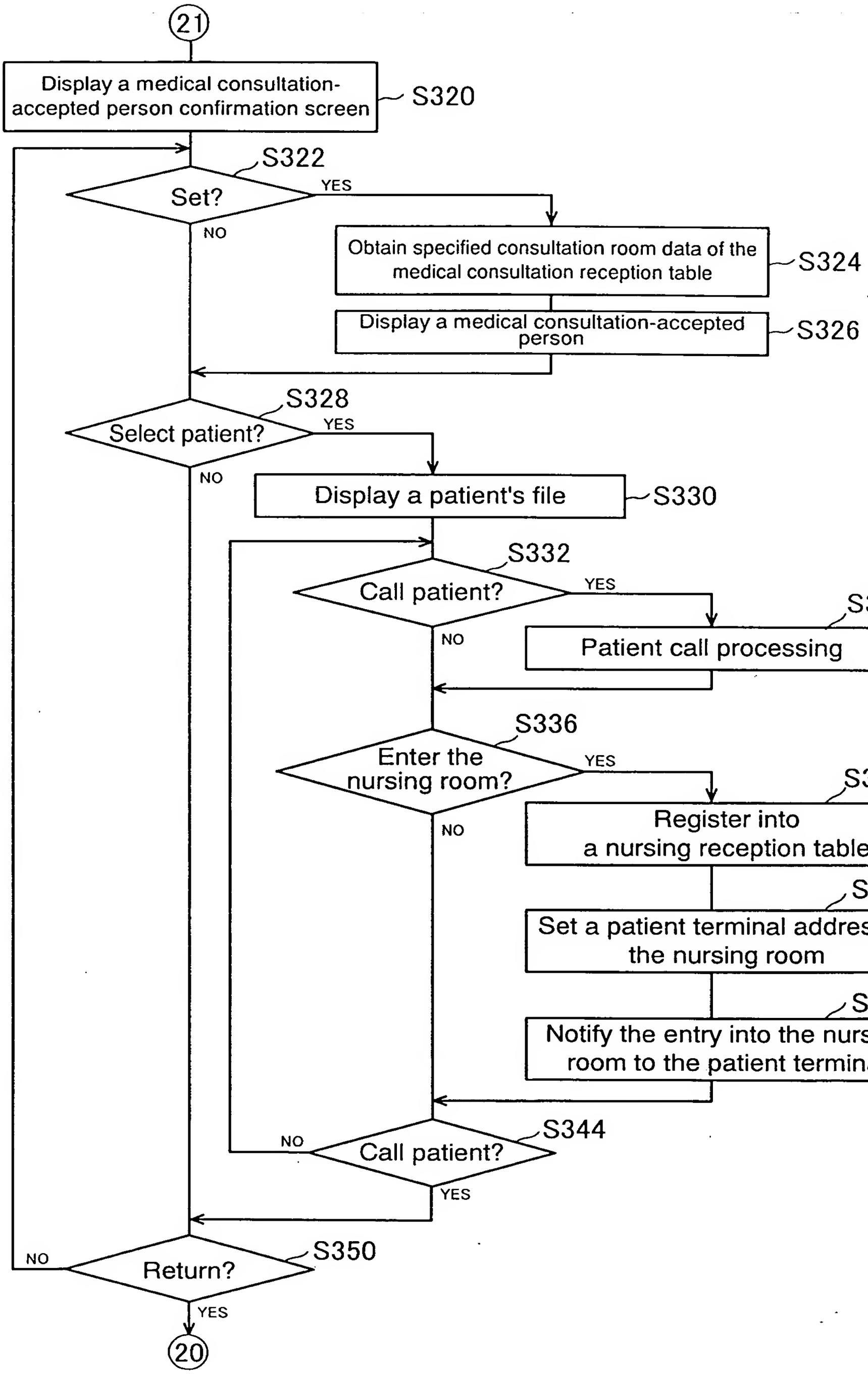


Fig. 15

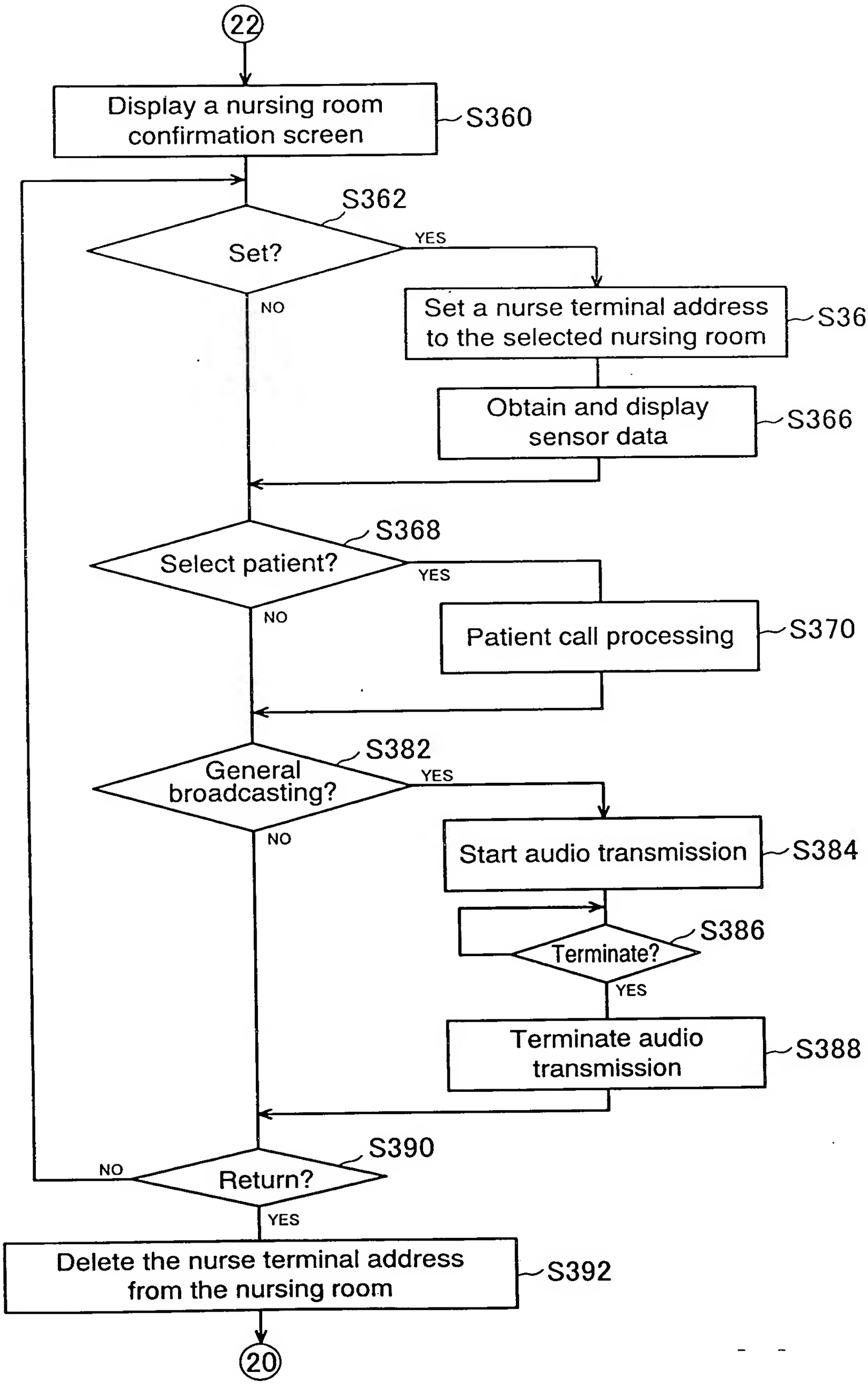

22
Display a nursing room confirmation screen
S360
S362
Set?
YES
NO
Set a nurse terminal address to the selected nursing room
S364
Obtain and display sensor data
S366
S368
Select patient?
YES
NO
Patient call processing
S370
S382
General broadcasting?
YES
NO
Start audio transmission
S384
Terminate?
S386
YES
Terminate audio transmission
S388
S390
Return?
NO
YES
Delete the nurse terminal address from the nursing room
S392
20

Fig. 16

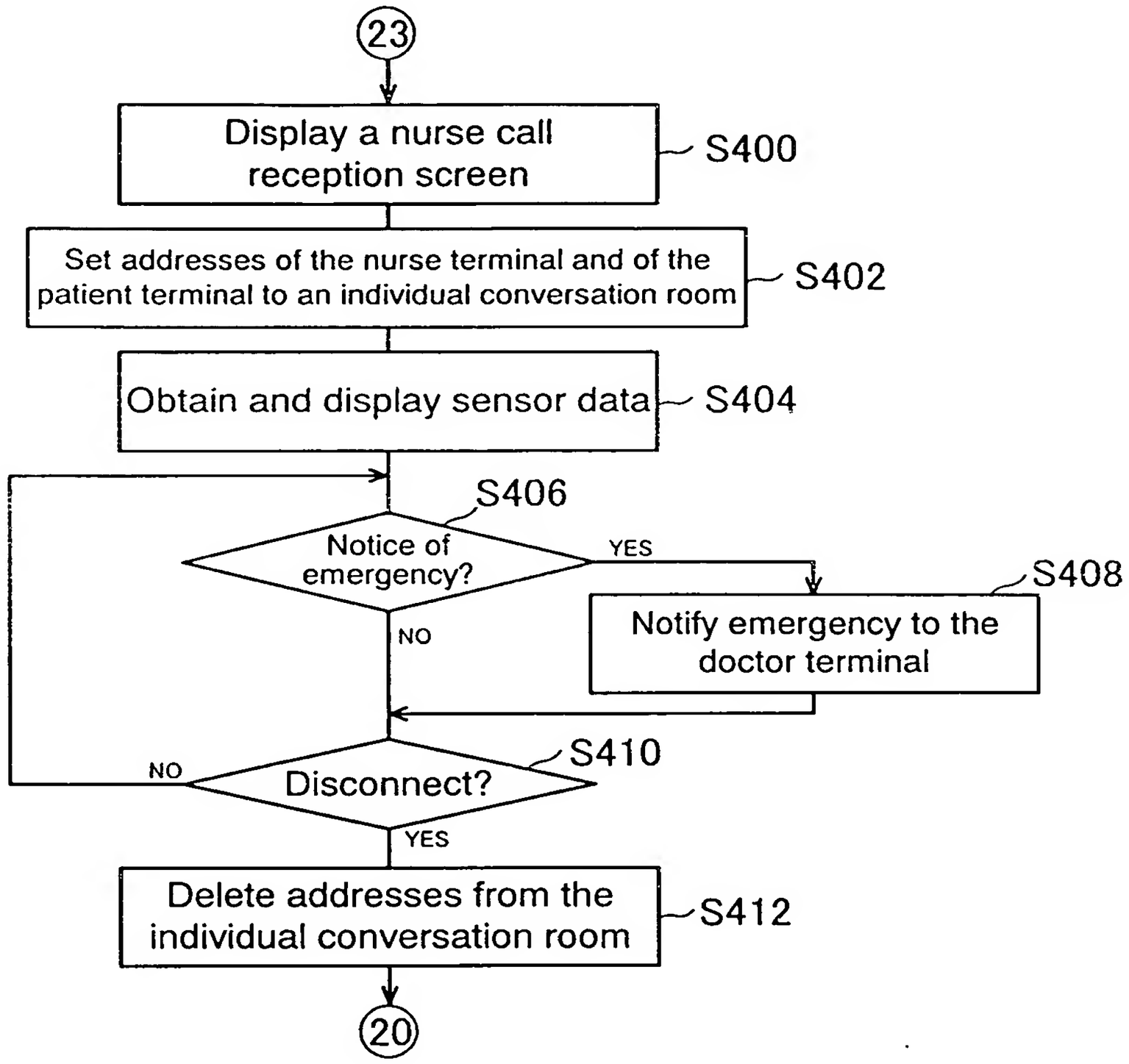

23
Display a nurse call reception screen
S400
Set addresses of the nurse terminal and of the patient terminal to an individual conversation room
S402
Obtain and display sensor data
S404
S406
Notice of emergency?
YES
S408
Notify emergency to the doctor terminal
NO
S410
Disconnect?
NO
YES
Delete addresses from the individual conversation room
S412
20

Fig. 17

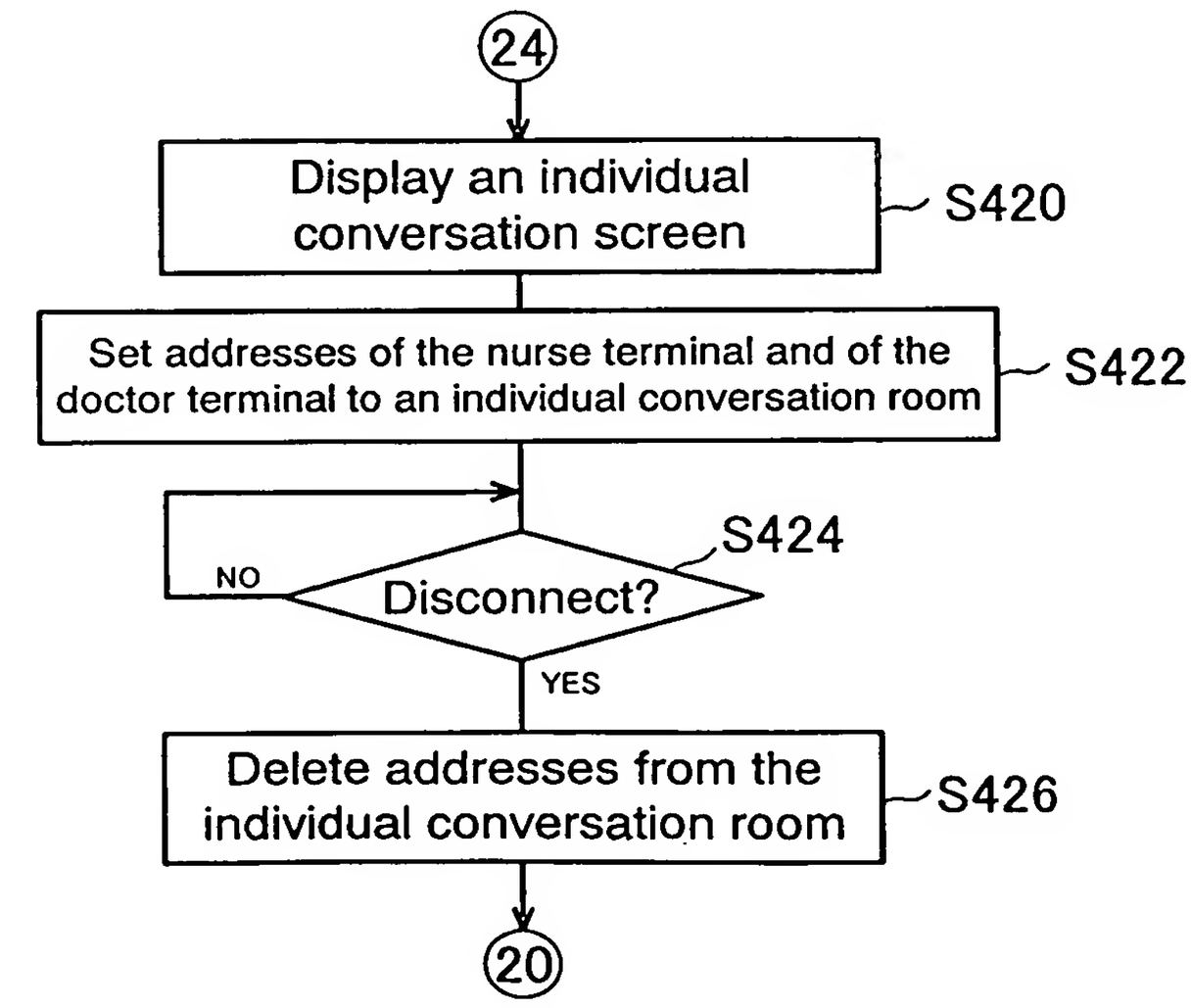

24
Display an individual conversation screen
S420
Set addresses of the nurse terminal and of the doctor terminal to an individual conversation room
S422
S424
Disconnect?
NO
YES
Delete addresses from the individual conversation room
S426
20

Fig. 18

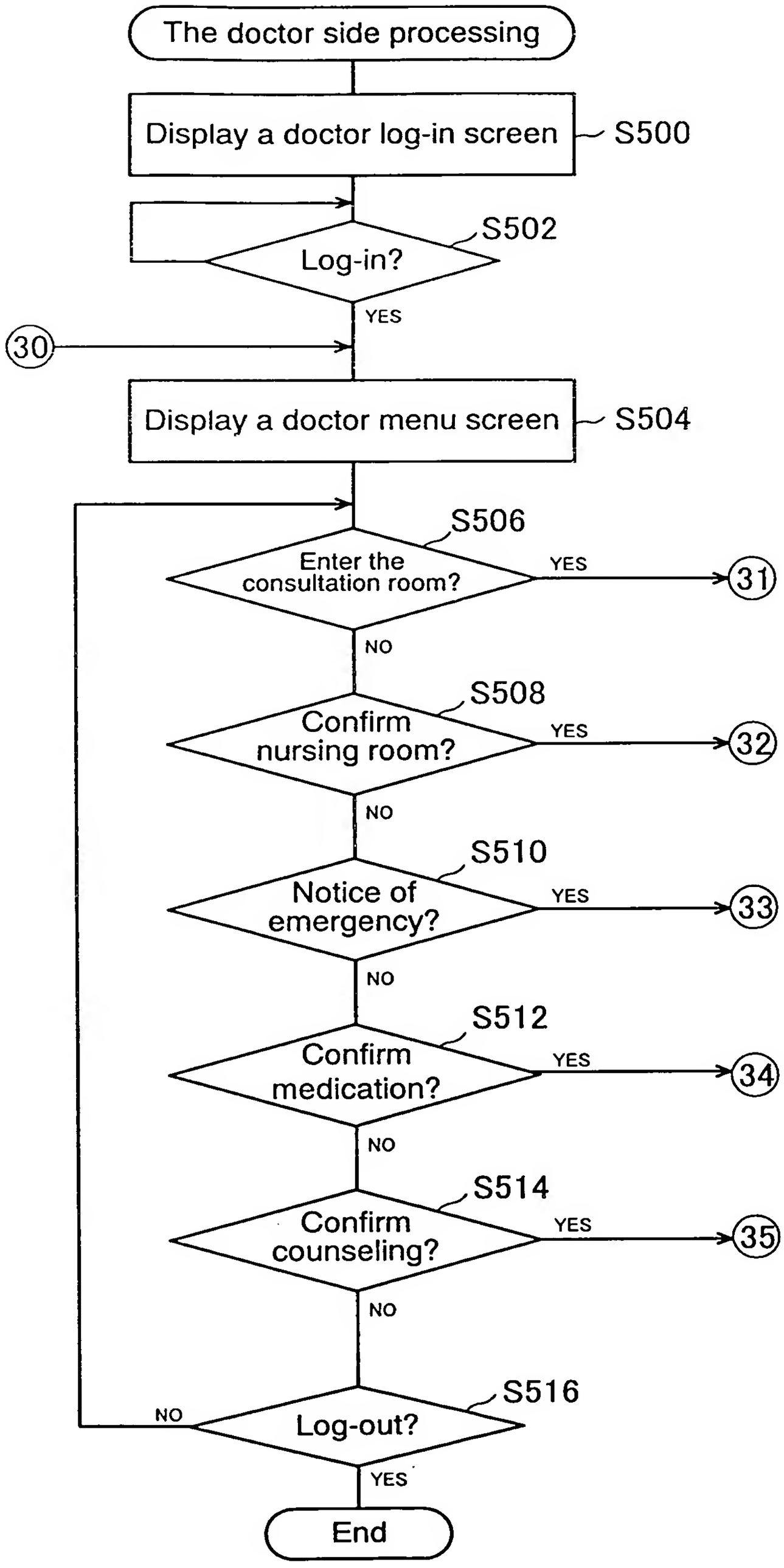

The doctor side processing
Display a doctor log-in screen
S500
S502
Log-in?
YES
30
Display a doctor menu screen
S504
S506
Enter the consultation room?
YES
31
NO
S508
Confirm nursing room?
YES
32
NO
S510
Notice of emergency?
YES
33
NO
S512
Confirm medication?
YES
34
NO
S514
Confirm counseling?
YES
35
NO
S516
Log-out?
NO
YES
End

Fig. 19

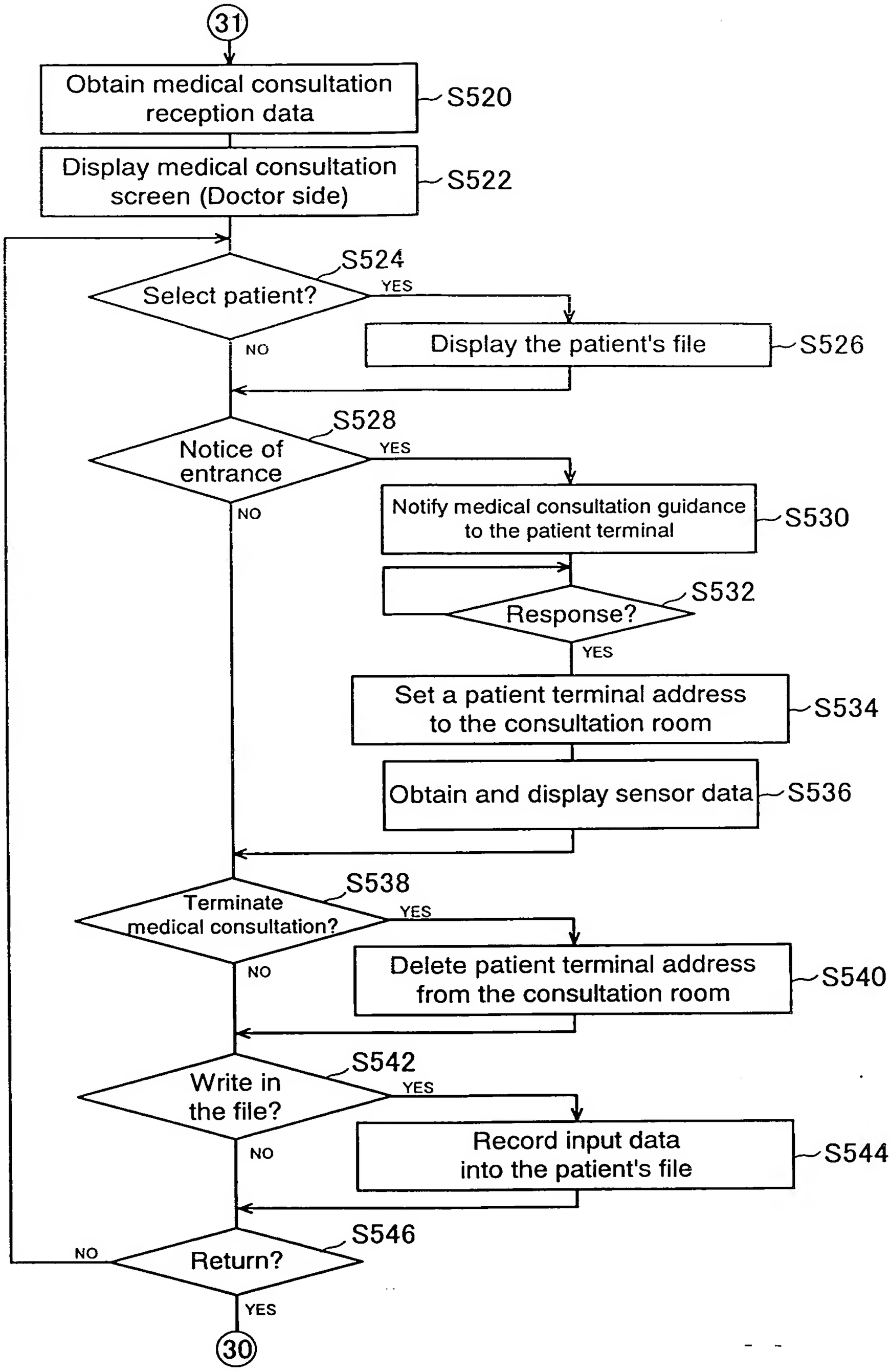

31
Obtain medical consultation reception data
S520
Display medical consultation screen (Doctor side)
S522
S524
Select patient?
YES
NO
Display the patient's file
S526
S528
Notice of entrance
YES
NO
Notify medical consultation guidance to the patient terminal
S530
S532
Response?
YES
Set a patient terminal address to the consultation room
S534
Obtain and display sensor data
S536
S538
Terminate medical consultation?
YES
NO
Delete patient terminal address from the consultation room
S540
S542
Write in the file?
YES
NO
Record input data into the patient's file
S544
S546
Return?
NO
YES
30

Fig. 20

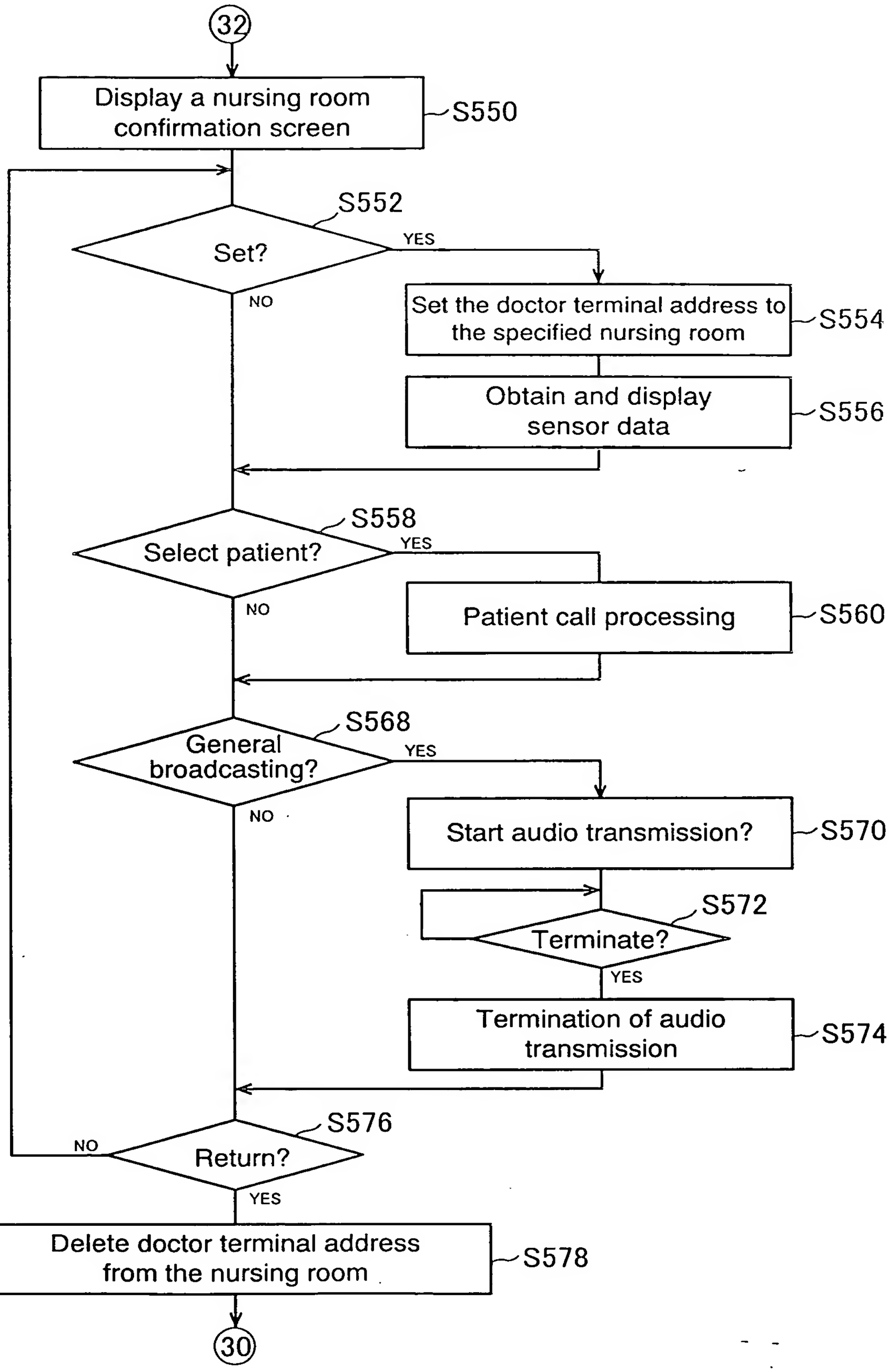

32
Display a nursing room confirmation screen
S550
S552
Set?
YES
NO
Set the doctor terminal address to the specified nursing room
S554
Obtain and display sensor data
S556
S558
Select patient?
YES
NO
Patient call processing
S560
S568
General broadcasting?
YES
NO
Start audio transmission?
S570
S572
Terminate?
YES
Termination of audio transmission
S574
S576
NO
Return?
YES
Delete doctor terminal address from the nursing room
S578
30

Fig. 21

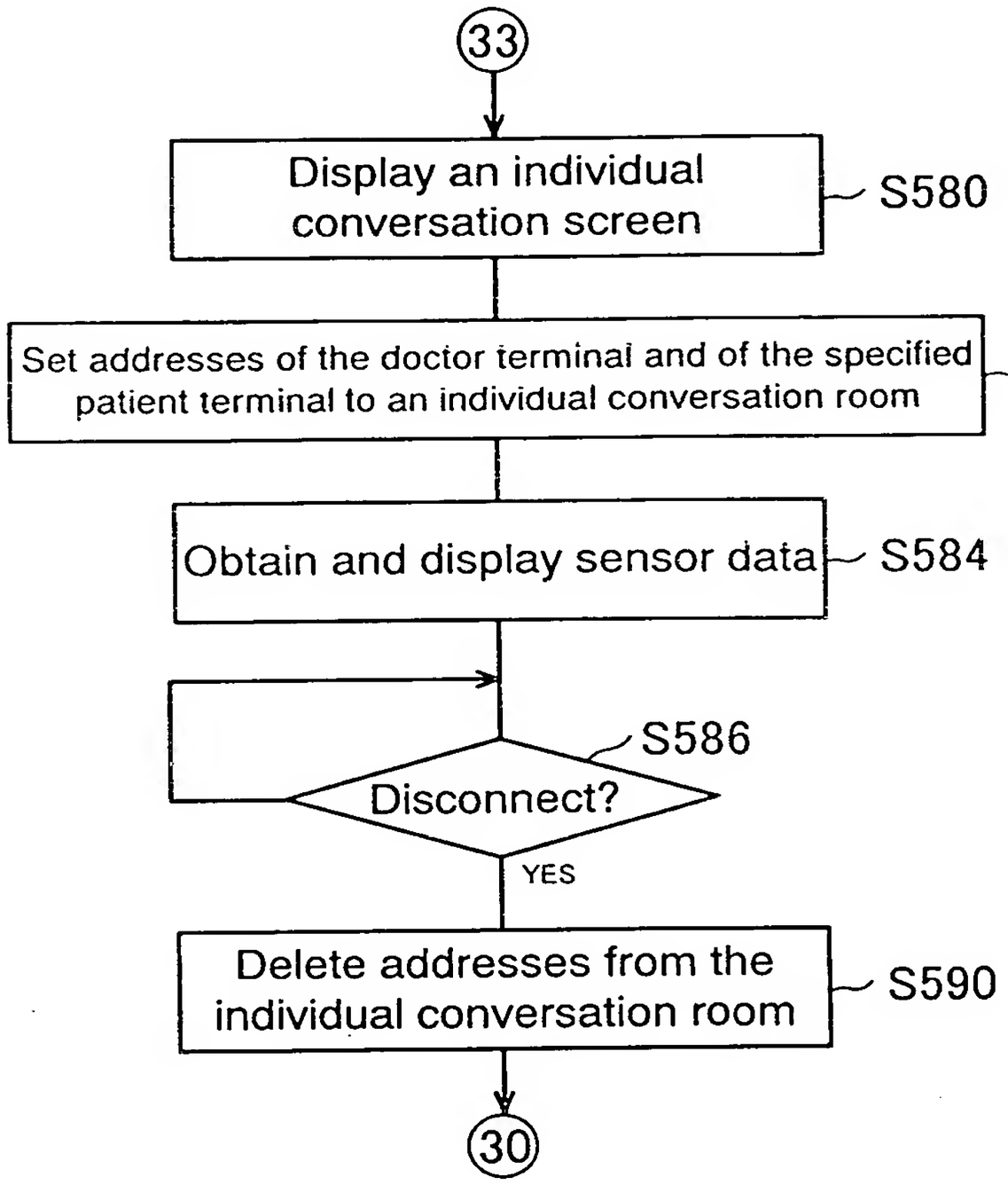

33
Display an individual conversation screen
S580
Set addresses of the doctor terminal and of the specified patient terminal to an individual conversation room
S582
Obtain and display sensor data
S584
S586
Disconnect?
YES
Delete addresses from the individual conversation room
S590
30

Fig. 22

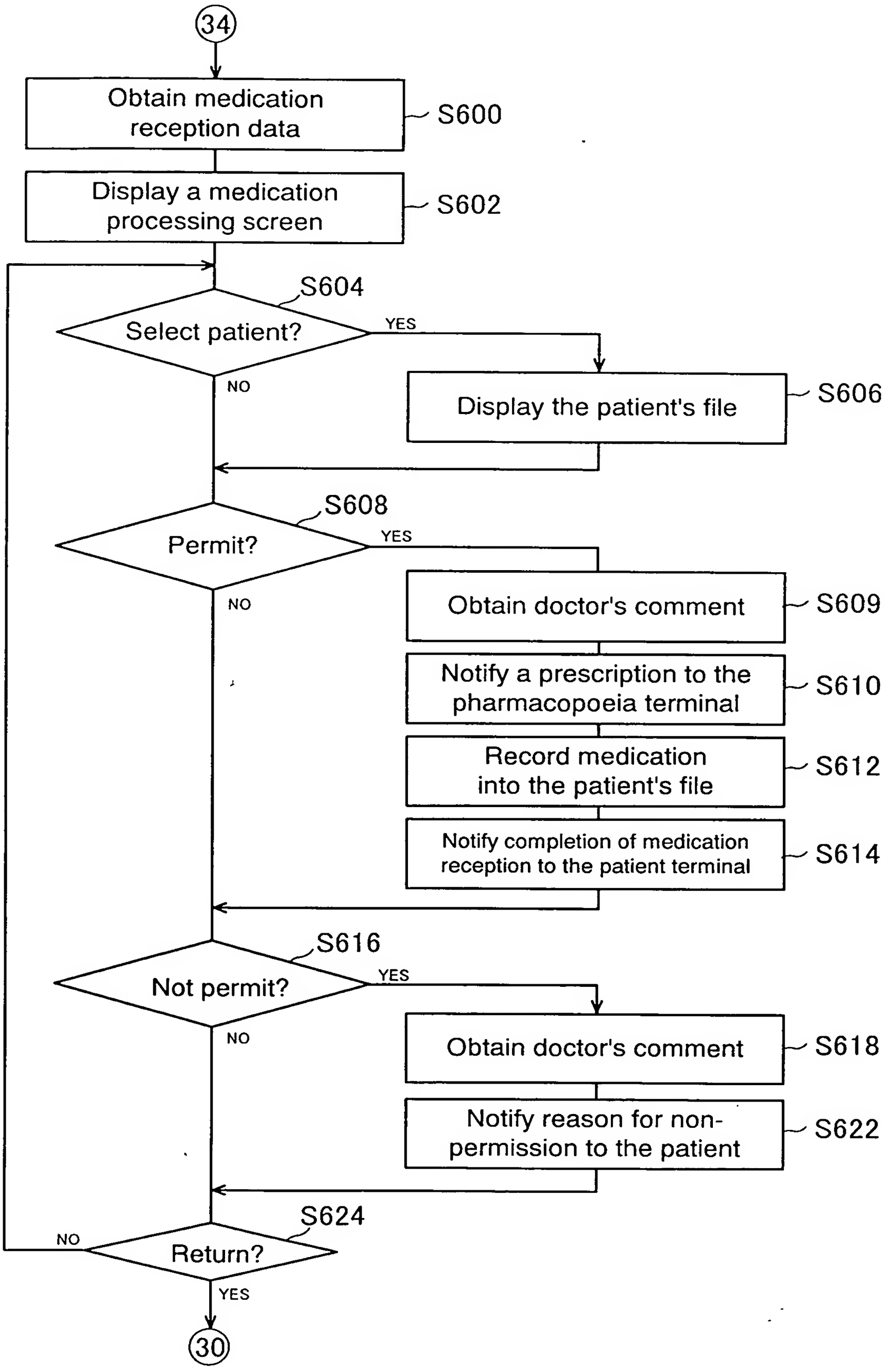

34
Obtain medication reception data
S600
Display a medication processing screen
S602
S604
Select patient?
YES
NO
Display the patient's file
S606
S608
Permit?
YES
NO
Obtain doctor's comment
S609
Notify a prescription to the pharmacopoeia terminal
S610
Record medication into the patient's file
S612
Notify completion of medication reception to the patient terminal
S614
S616
Not permit?
YES
NO
Obtain doctor's comment
S618
Notify reason for non-permission to the patient
S622
S624
Return?
NO
YES
30

Fig. 23

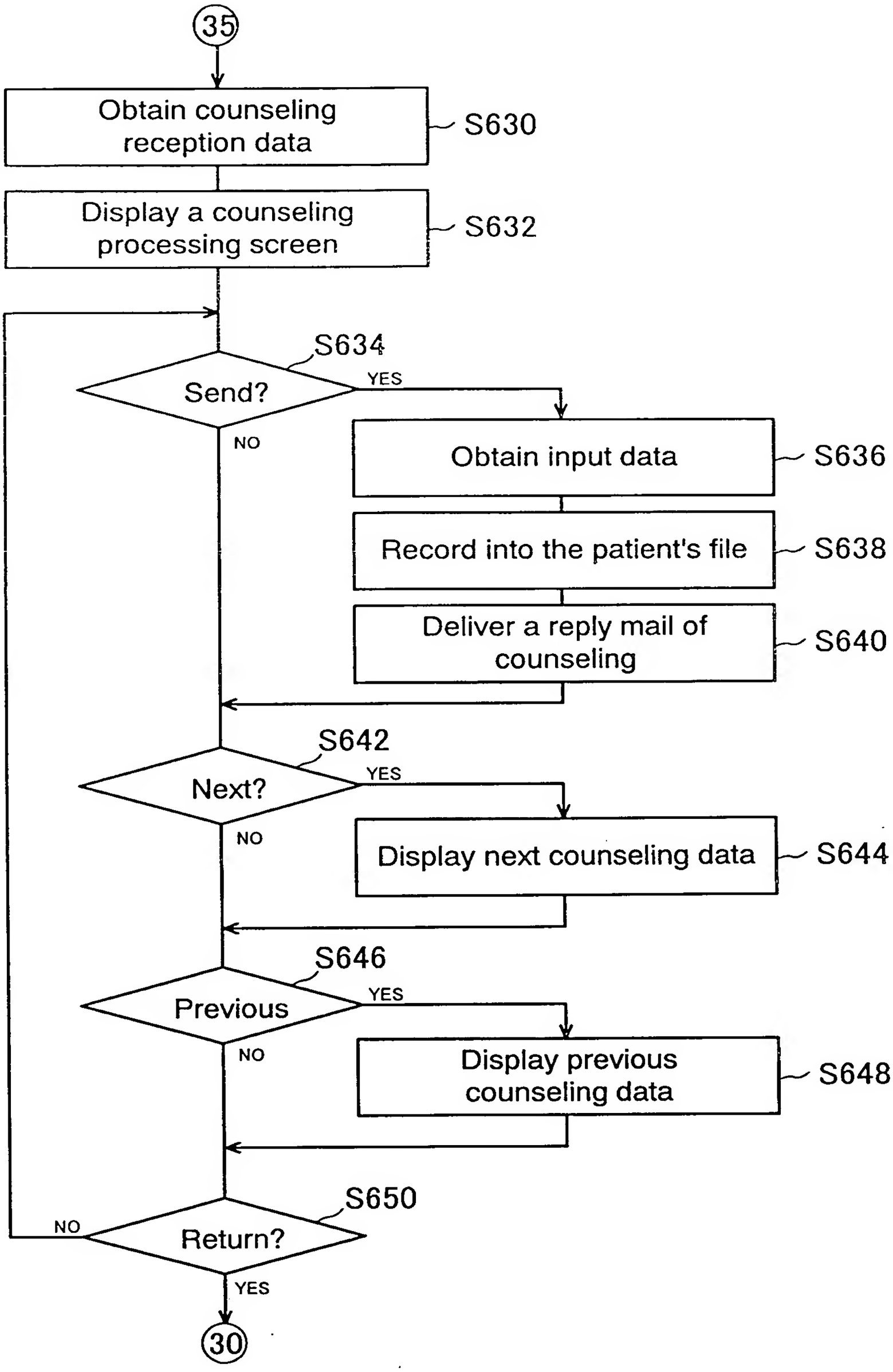

35
Obtain counseling reception data
S630
Display a counseling processing screen
S632
S634
Send?
YES
NO
Obtain input data
S636
Record into the patient's file
S638
Deliver a reply mail of counseling
S640
S642
Next?
YES
NO
Display next counseling data
S644
S646
Previous
YES
NO
Display previous counseling data
S648
S650
Return?
NO
YES
30

Fig. 24

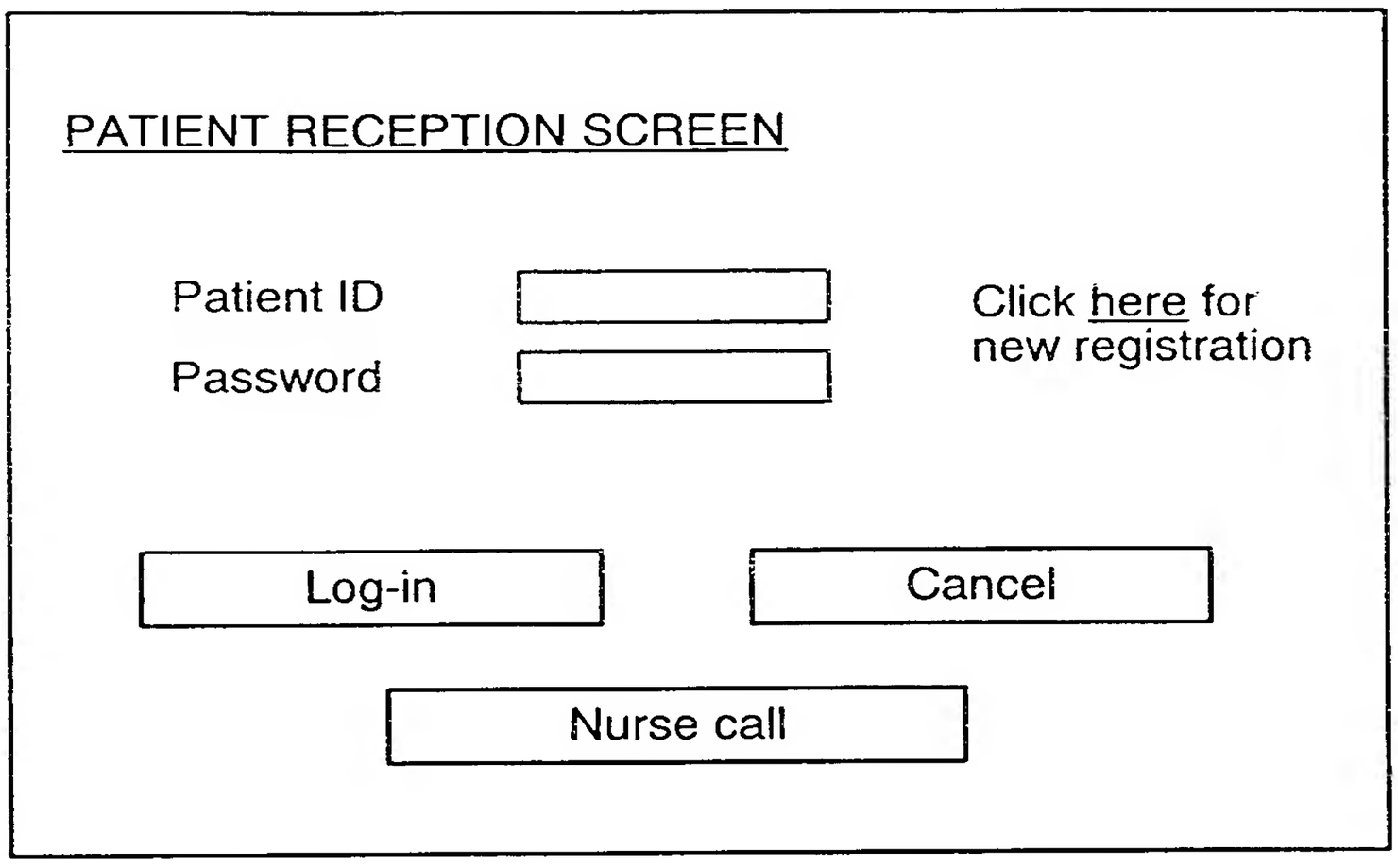

PATIENT RECEPTION SCREEN
Patient ID
Password
Click here for new registration
Log-in
Cancel
Nurse call

Fig. 25

NEW REGISTRATION SCREEN

Name

Address

Date of birth ▽ year ▽ month ▽ day

Sex ○ Male ○ Female

Insurance No.

Tel. No.

Person to be contacted in case of emergency

Tel. No. of above person

E-mail address

Doctor in charge

Anamnesis Name of disease When

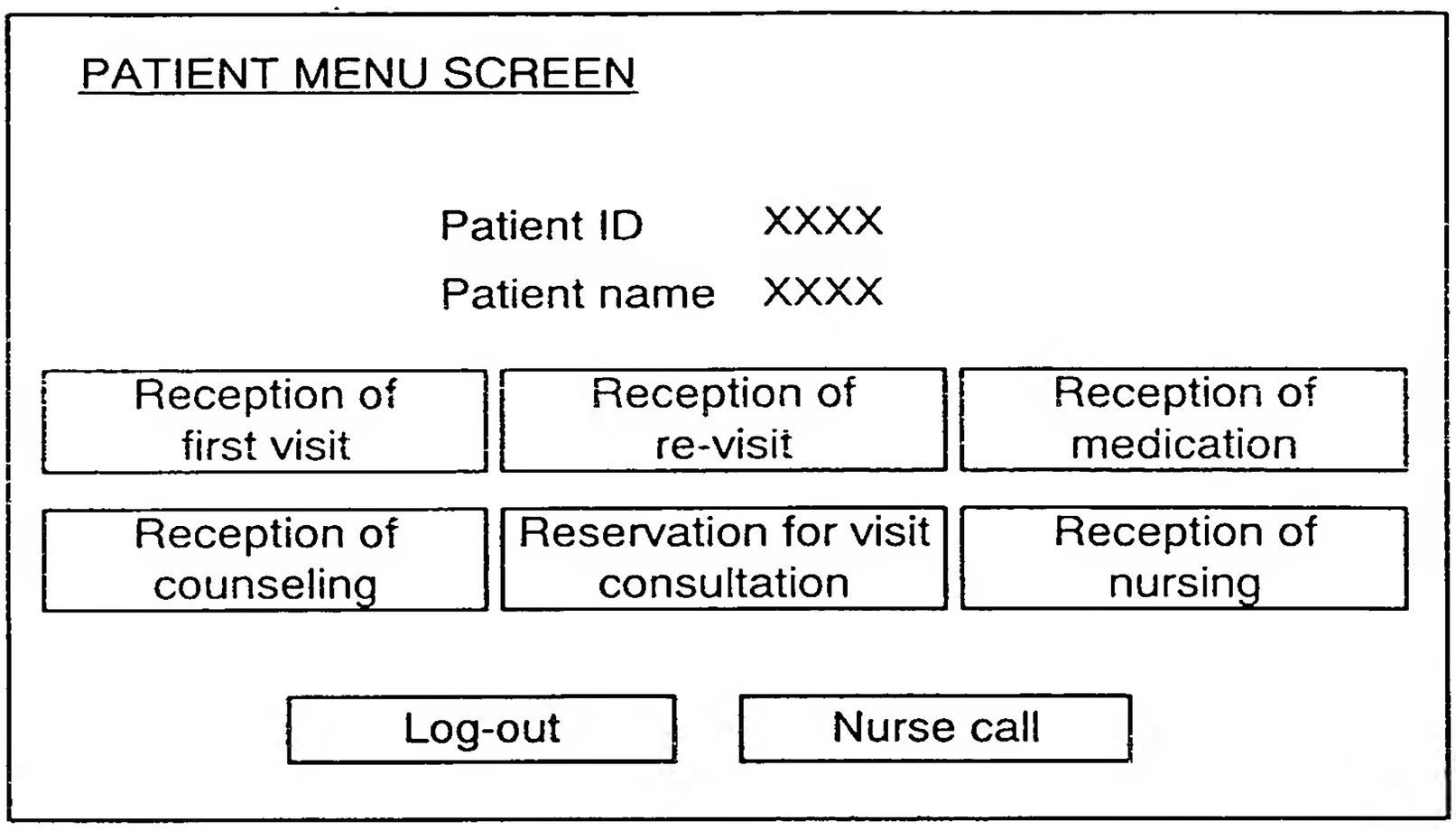
Name of disease When

Name of disease When

Allergy ○ No ○ Yes – Content

Send Reset Return

Fig. 26


PATIENT MENU SCREEN
Patient ID XXXX
Patient name XXXX
Reception of first visit
Reception of re-visit
Reception of medication
Reception of counseling
Reservation for visit consultation
Reception of nursing
Log-out
Nurse call

10/552781

Fig. 27

FIRST VISIT RECEPTION SCREEN

Call receptionist

Patient ID XXXX

Patient name XXXX

Select medical consultation department

○ Internal medicine ○ Surgery ○ Orthopedics ○ Dermatology

○ Urology ○ Gynecology ○ Pediatrics ○ Psychiatry

○ Ophthalmology ○ Otolaryngology ○ Dentistry

○ Not sure

Rational symptom

Physical condition

Appetite ○ Normal ○ Bad

Sleep ○ Normal ○ Bad

Bowel movements (☐ times per ☐ days) ○ Watery ○ Soft ○ Normal ○ Hard ○ Black stool ○ Bloody stool

Urine (☐ times per ☐ days)

Alcohols (☐ mls a day) ・Beer (☐ bottles a day)

Smoking (☐ cigarettes a day)

Send Return Nurse call

Fig. 28

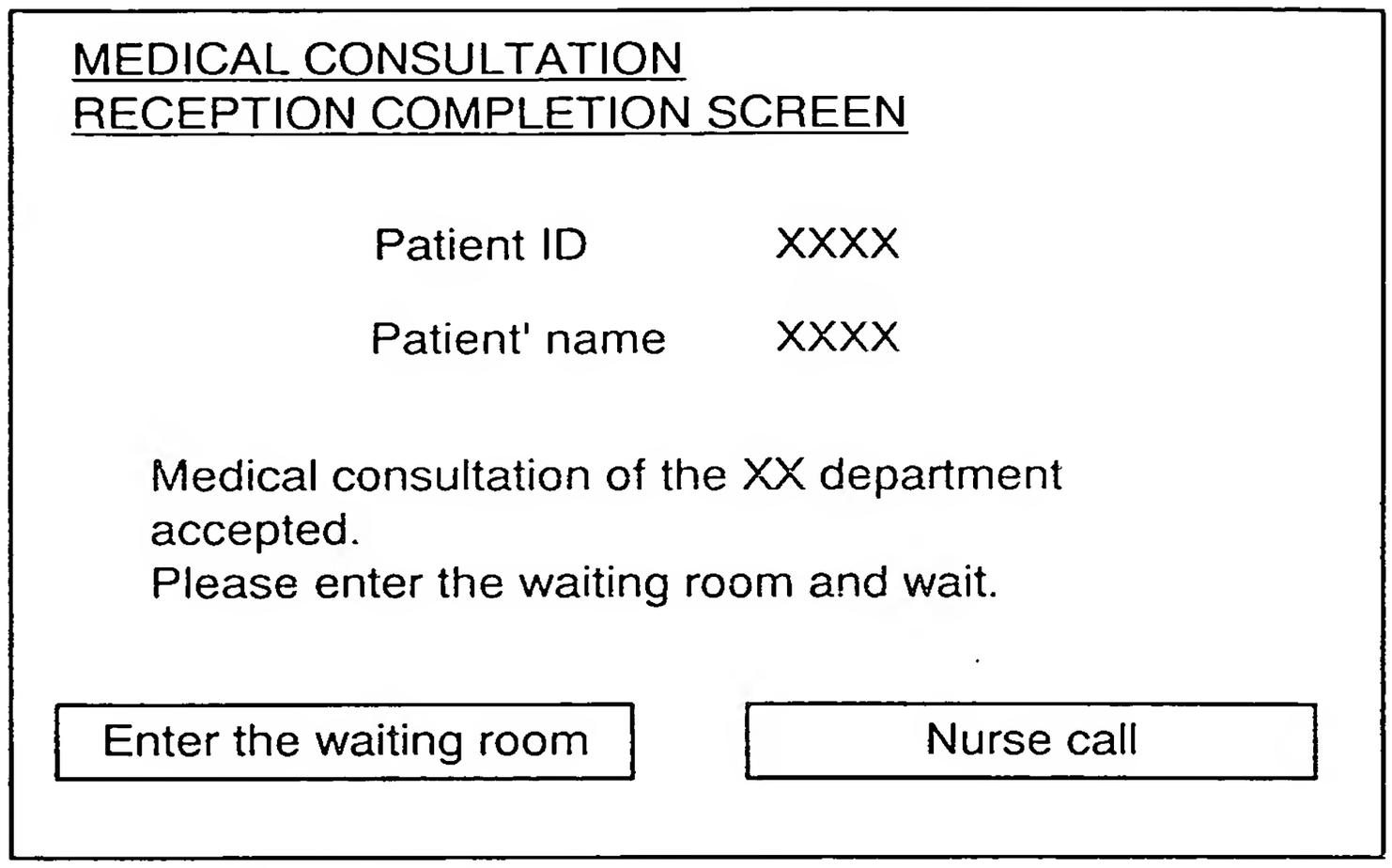

MEDICAL CONSULTATION
RECEPTION COMPLETION SCREEN
Patient ID XXXX
Patient' name XXXX
Medical consultation of the XX department accepted.
Please enter the waiting room and wait.
Enter the waiting room
Nurse call

Fig. 29

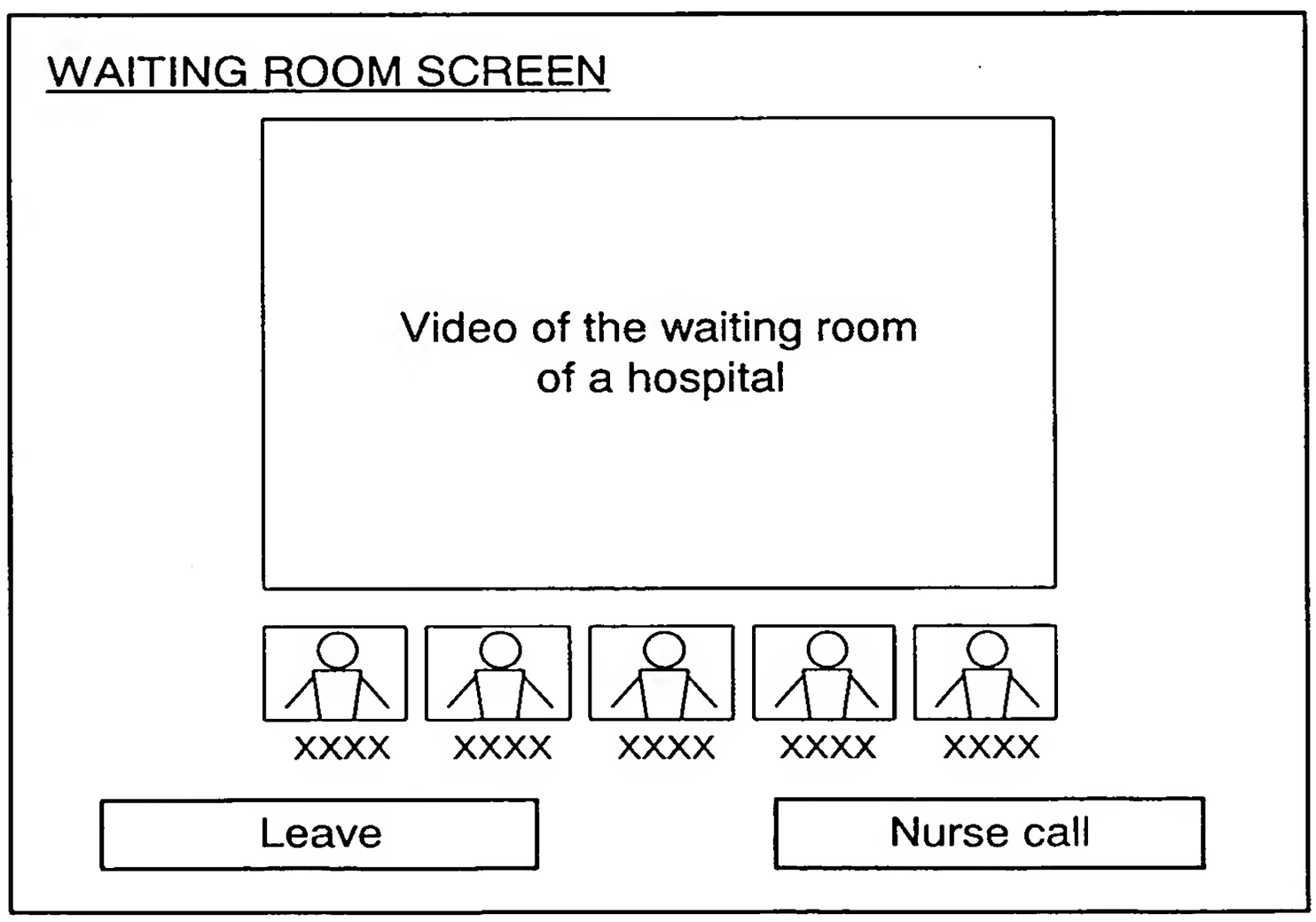

WAITING ROOM SCREEN
Video of the waiting room of a hospital
XXXX
XXXX
XXXX
XXXX
XXXX
Leave
Nurse call

Fig. 30

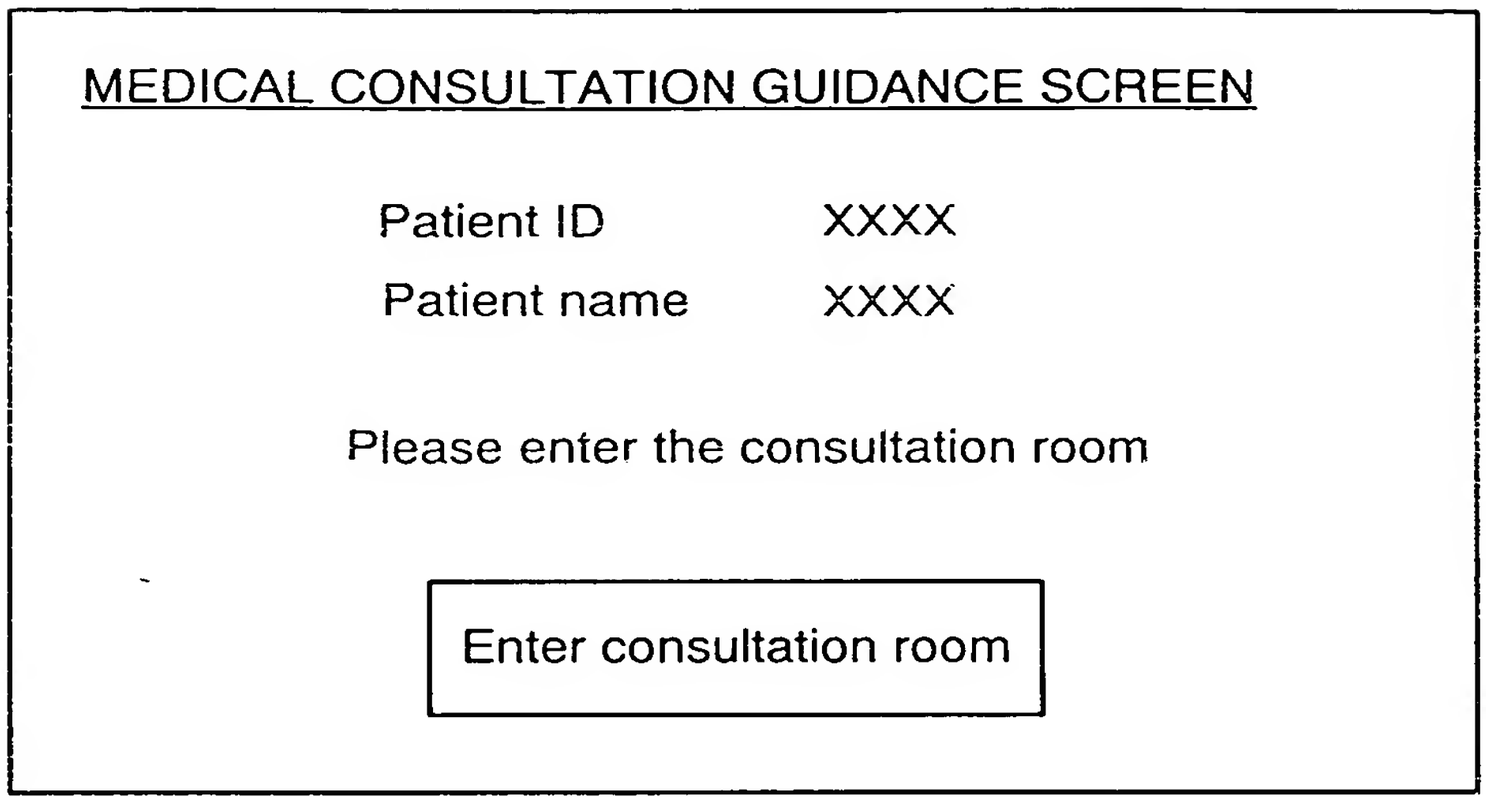

MEDICAL CONSULTATION GUIDANCE SCREEN
Patient ID XXXX
Patient name XXXX
Please enter the consultation room
Enter consultation room

Fig. 31

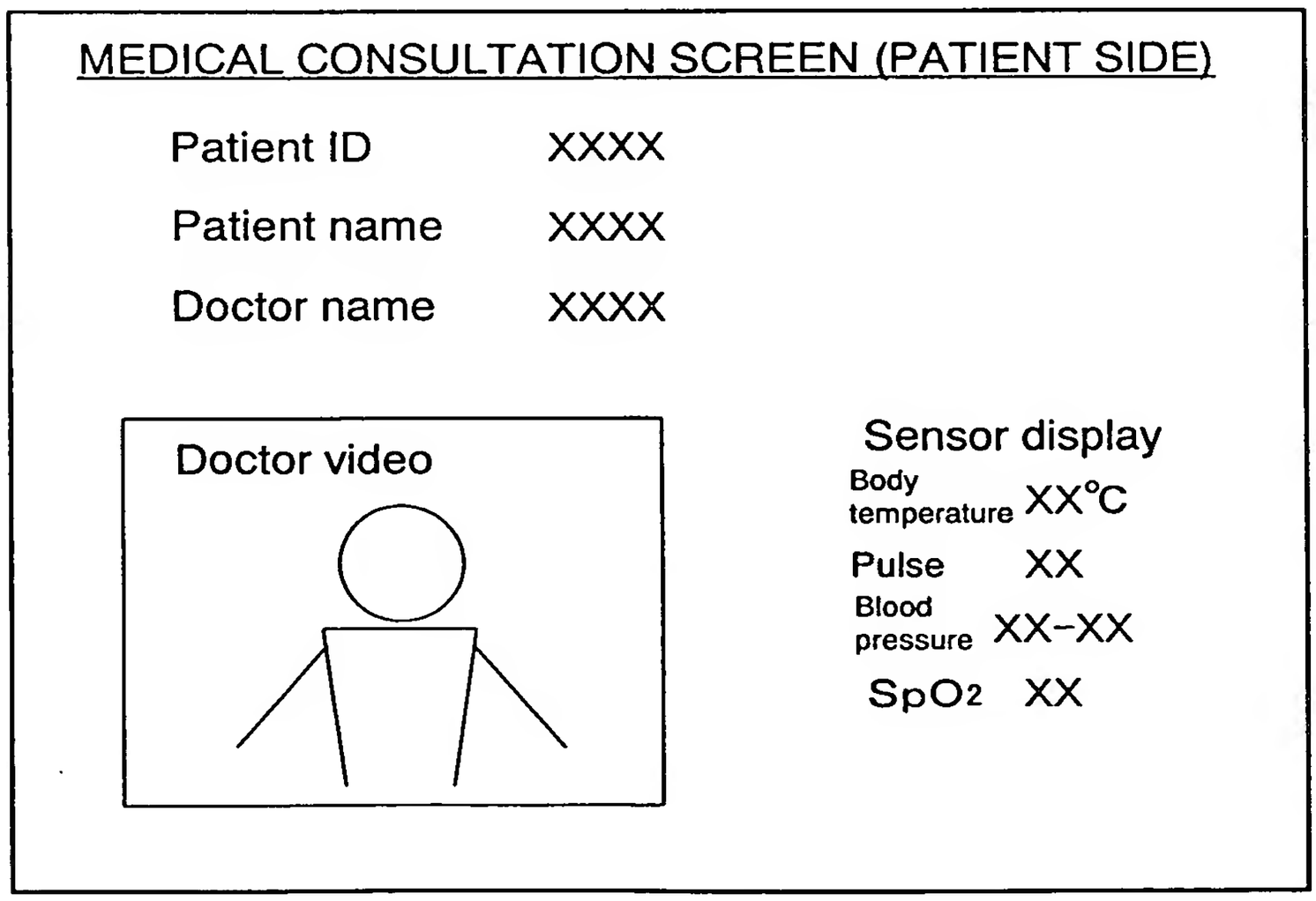

MEDICAL CONSULTATION SCREEN (PATIENT SIDE)
Patient ID XXXX
Patient name XXXX
Doctor name XXXX
Doctor video
Sensor display
Body temperature XX°C
Pulse XX
Blood pressure XX-XX
SpO2 XX

Fig. 32

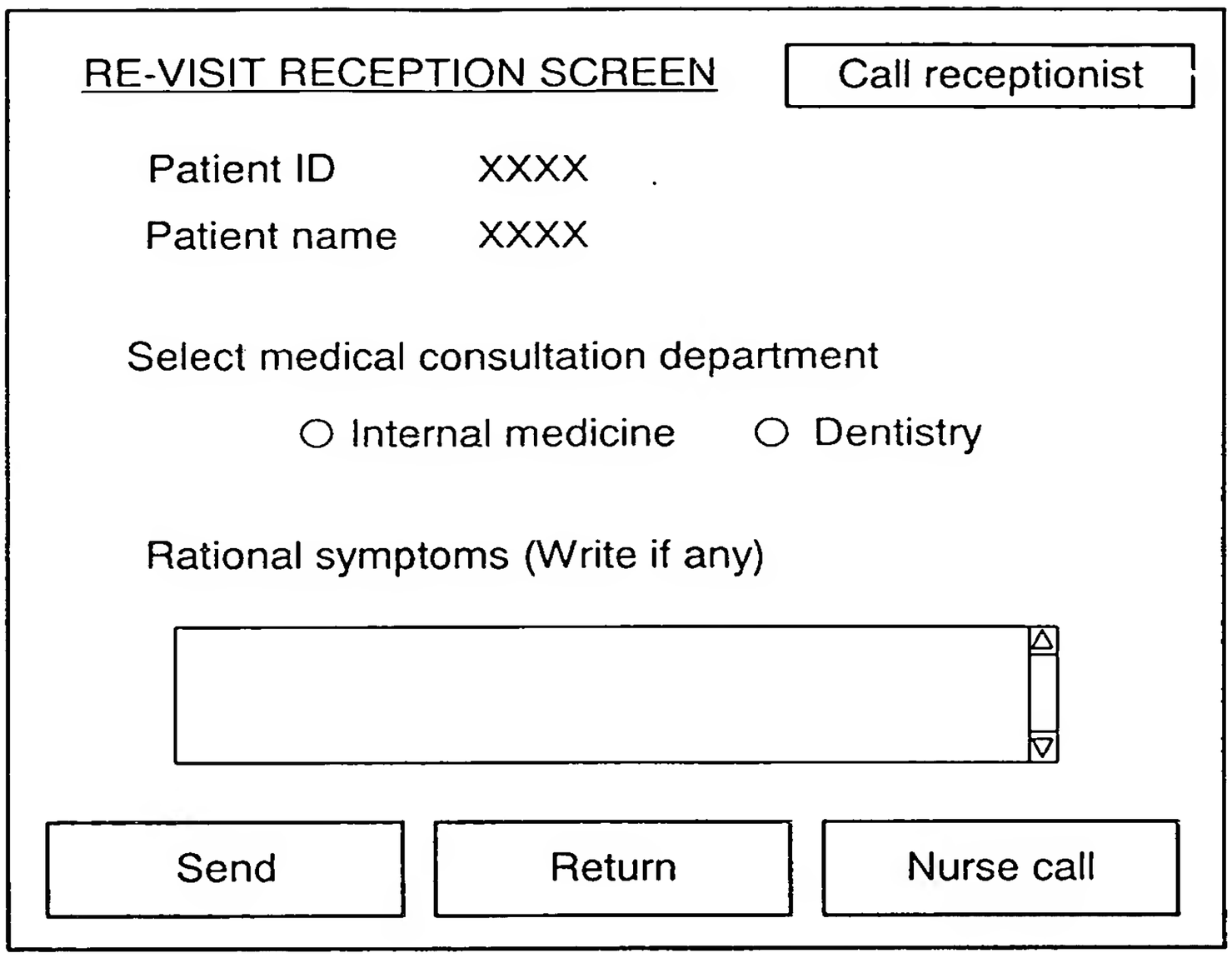
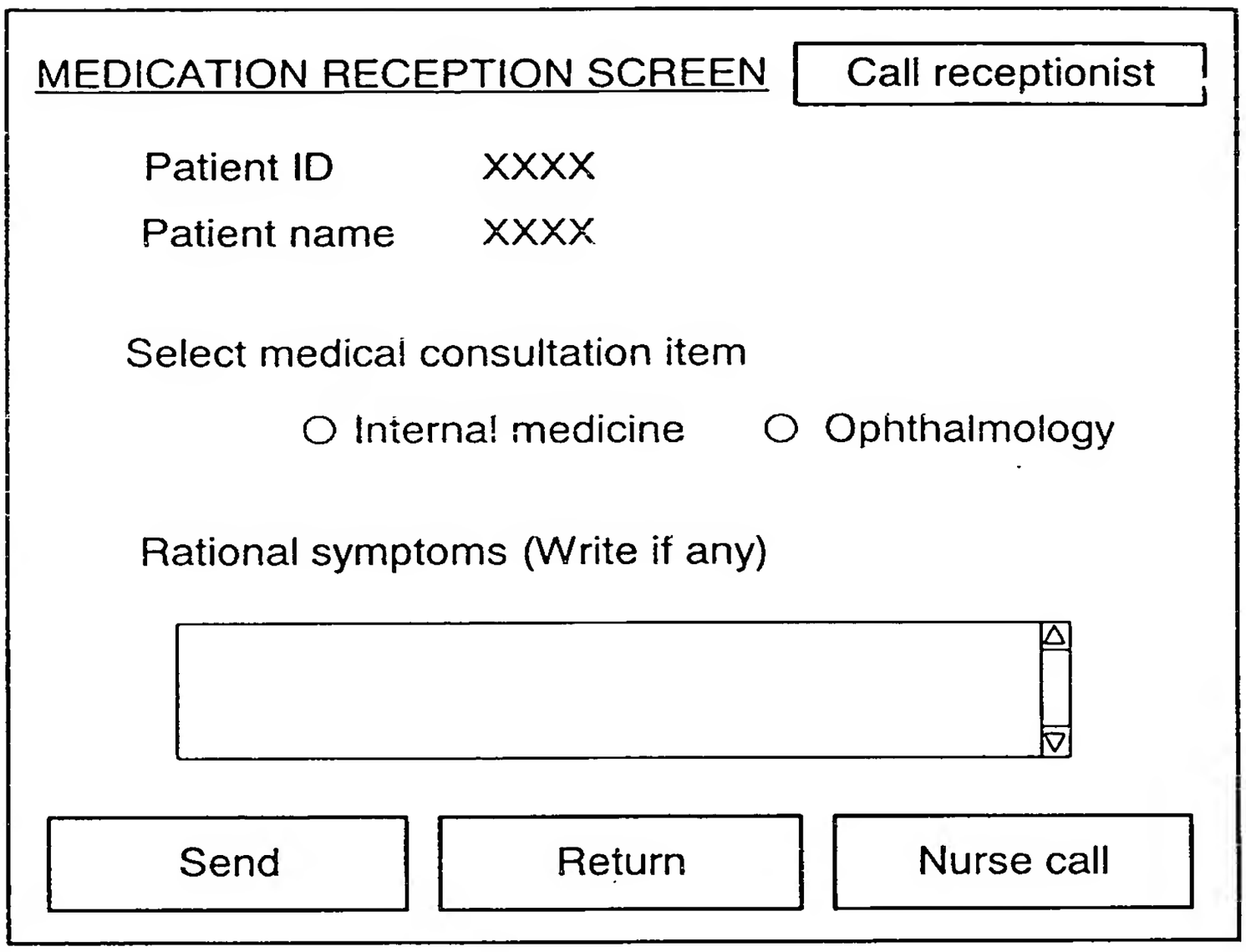

RE-VISIT RECEPTION SCREEN
Call receptionist
Patient ID XXXX
Patient name XXXX
Select medical consultation department
○ Internal medicine
○ Dentistry
Rational symptoms (Write if any)
Send
Return
Nurse call

Fig. 33


MEDICATION RECEPTION SCREEN
Call receptionist
Patient ID XXXX
Patient name XXXX
Select medical consultation item
O Internal medicine
O Ophthalmology
Rational symptoms (Write if any)
Send
Return
Nurse call

10/552781

Fig. 34

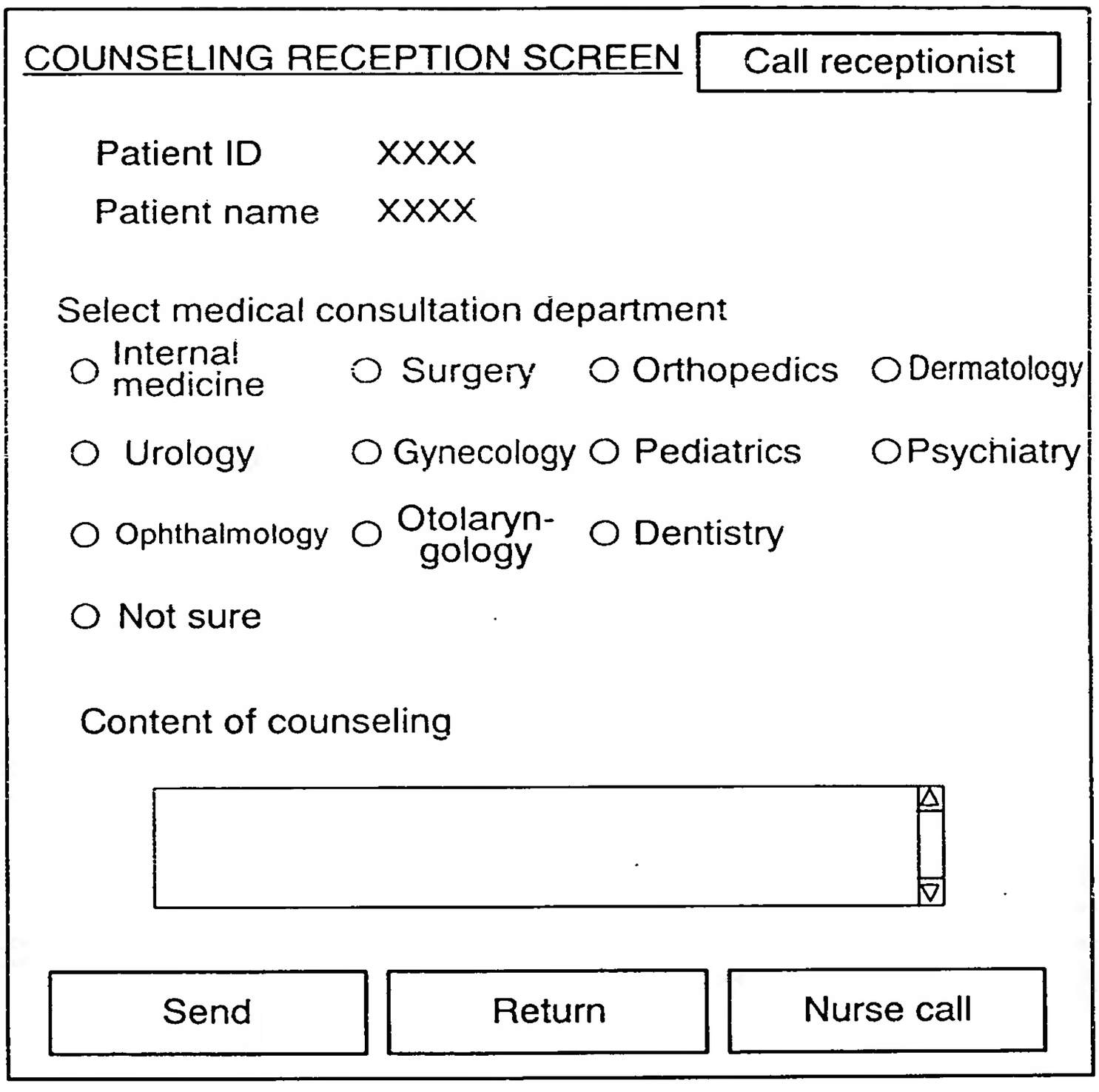


Fig. 35

VISIT RESERVATION SCREEN

Call receptionist

Patient ID XXXX

Patient name XXXX

Select medical consultation item

○ Internal medicine ○ Dentistry

Date ▽ month ▽ day Set

State of reservation

Consultation room (doctor)	9	10	11	12	13	14	15	16	17
First (XXXX)	■	▨	■	■	■		■		
Second (XXXX)		■			■		■		
Third (XXXX)	■		■		■			■	

■ : Reservation not permitted □ : Reservation permitted ▨ : Reserved

Reserve Cancel Return Nurse call

10/552781

Fig. 36

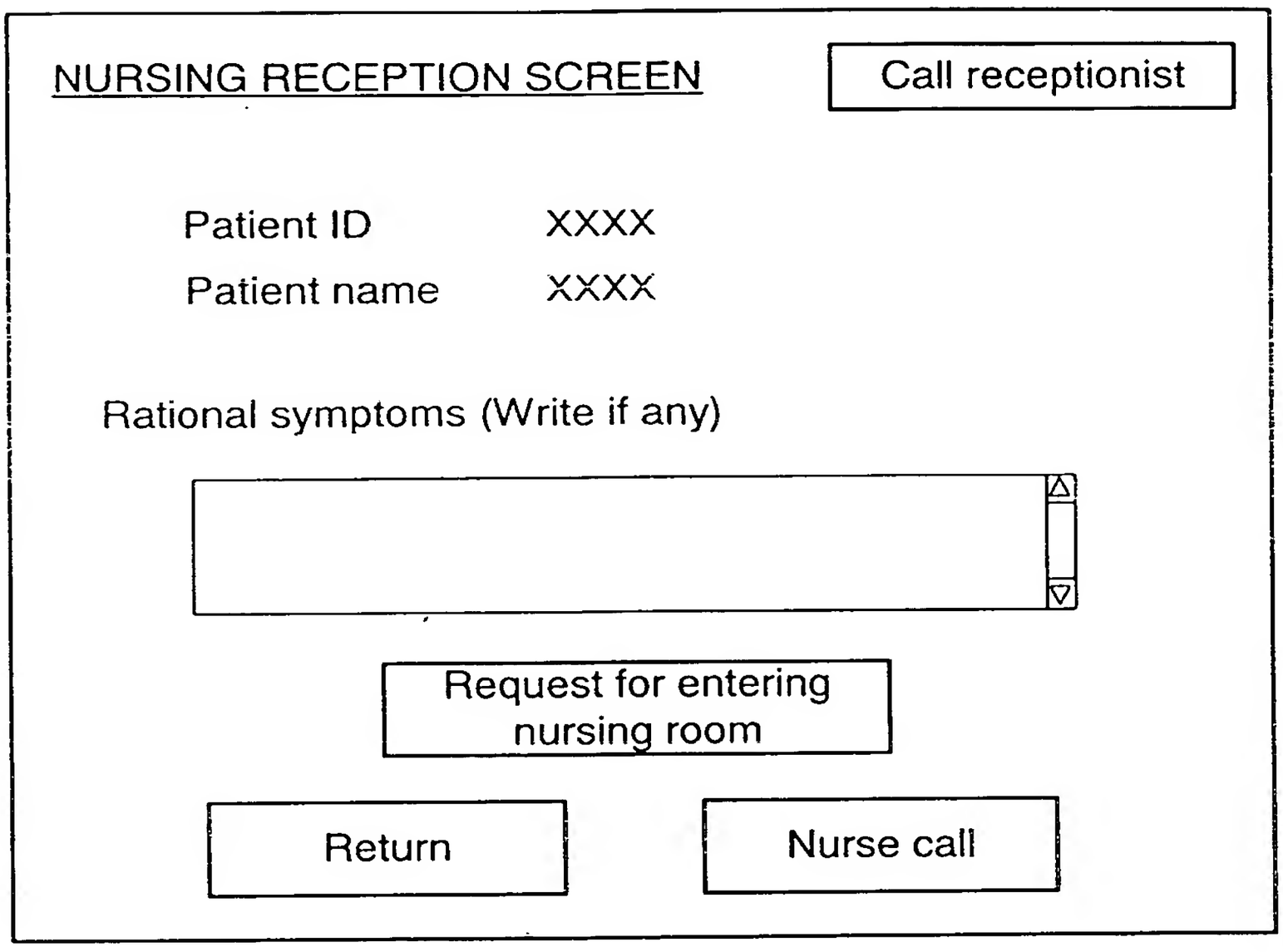


Fig. 37

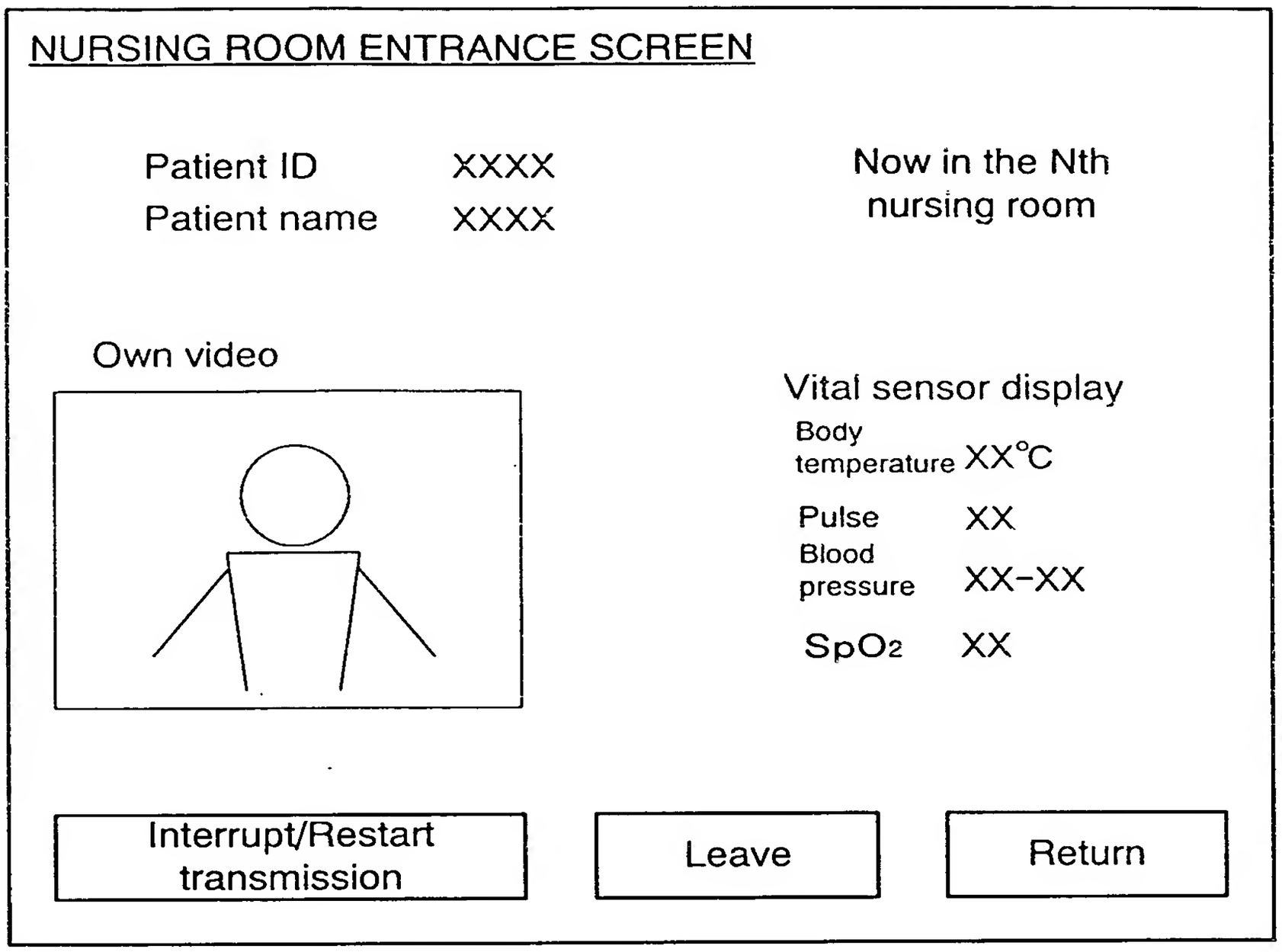

NURSING ROOM ENTRANCE SCREEN
Patient ID XXXX
Patient name XXXX
Now in the Nth nursing room
Own video
Vital sensor display
Body temperature XX°C
Pulse XX
Blood pressure XX-XX
SpO2 XX
Interrupt/Restart transmission
Leave
Return

Fig. 38

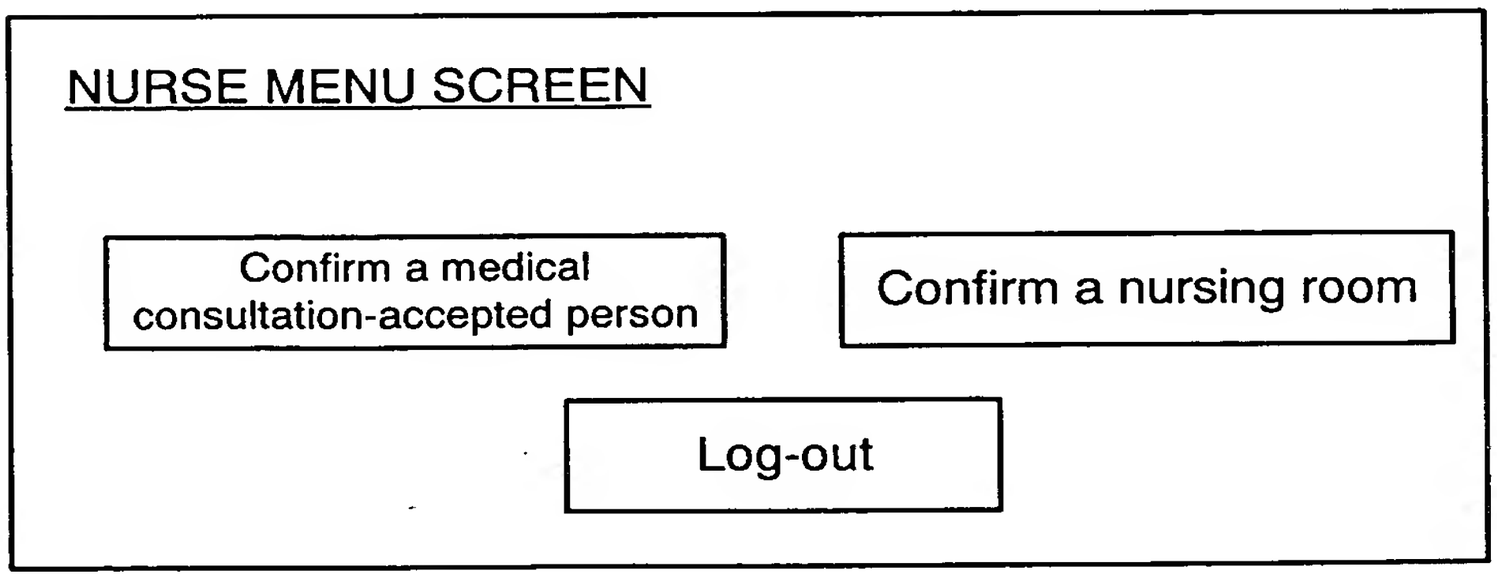

NURSE MENU SCREEN
Confirm a medical consultation-accepted person
Confirm a nursing room
Log-out

Fig. 39

MEDICAL CONSULTATION-ACCEPTED PERSON CONFIRMATION SCREEN

Call doctor

Select consultation room ▽

Set

X year X month X day

Nth consultation room
(Dr. XX is in charge)

No.	Patient ID	Patient name	Received at	Classification		Status
				Visit	At-home	
1	XXXX	XXXX	XX:XX	O		Finished (at XX:XX)
2	XXXX	XXXX	XX:XX		O	Finished (at XX:XX)
3	XXXX	XXXX	XX:XX	O		under consultation
4	XXXX	XXXX	XX:XX	O		
5	XXXX	XXXX	XX:XX		O	
...						

Return

Fig. 40

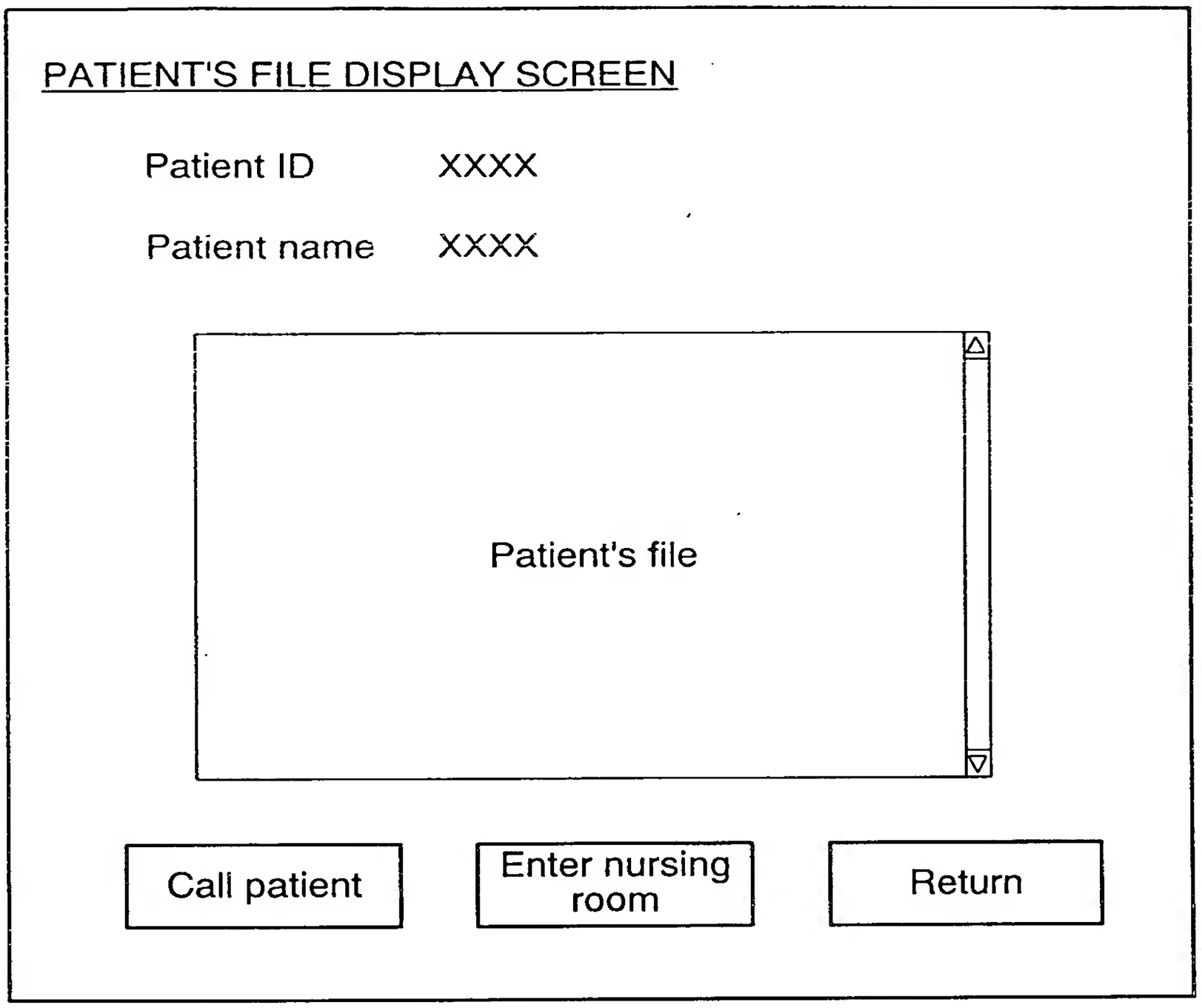

PATIENT'S FILE DISPLAY SCREEN
Patient ID XXXX
Patient name XXXX
Patient's file
Call patient
Enter nursing room
Return

Fig. 41

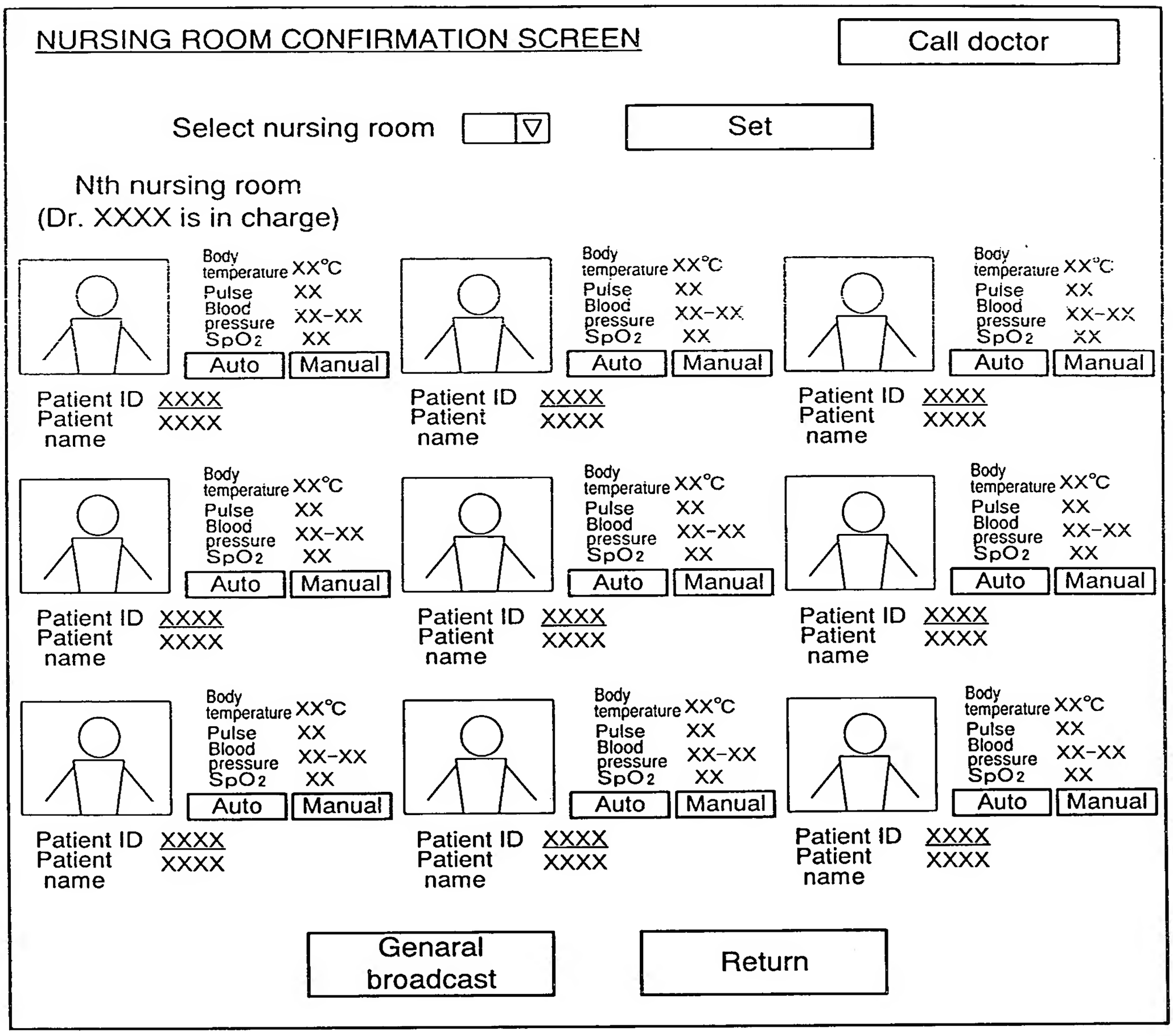
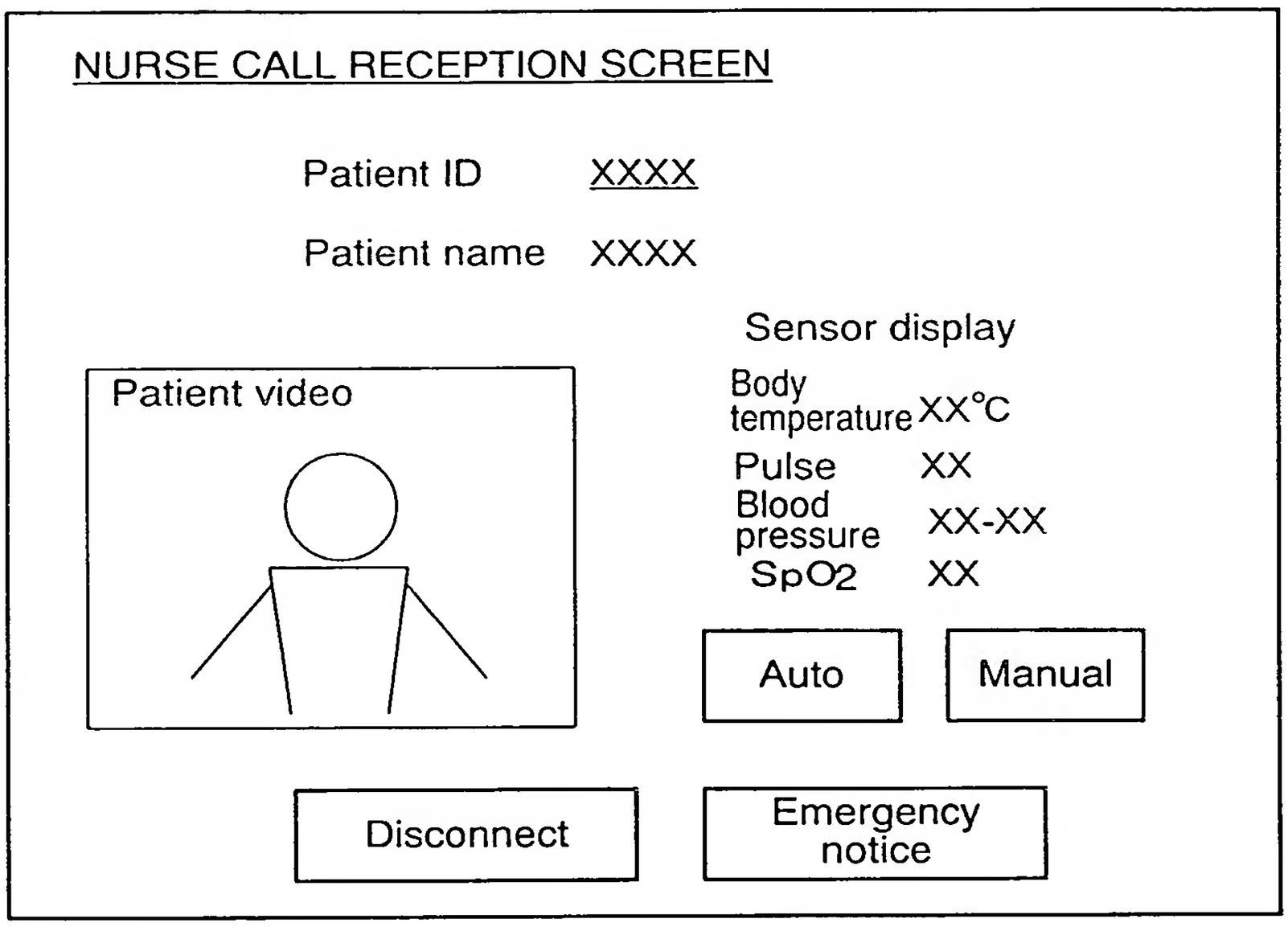

NURSING ROOM CONFIRMATION SCREEN
Call doctor
Select nursing room
Set
Nth nursing room
(Dr. XXXX is in charge)
Body temperature XX°C
Pulse XX
Blood pressure XX-XX
SpO2 XX
Auto
Manual
Patient ID XXXX
Patient name XXXX
Genaral broadcast
Return

Fig. 42


NURSE CALL RECEPTION SCREEN
Patient ID XXXX
Patient name XXXX
Sensor display
Patient video
Body temperature XX°C
Pulse XX
Blood pressure XX-XX
SpO2 XX
Auto
Manual
Disconnect
Emergency notice

10/552781

Fig. 43

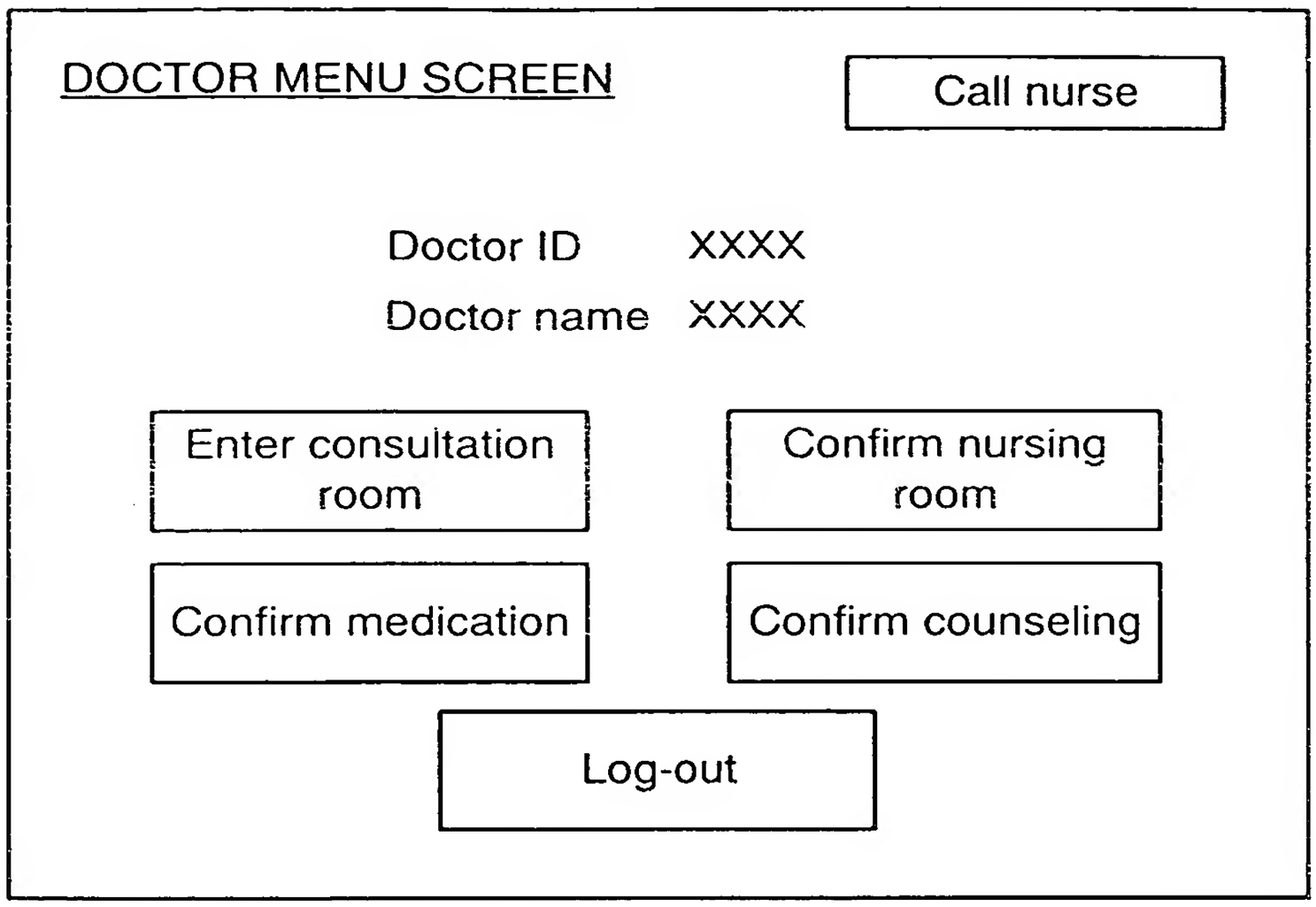


Fig. 44

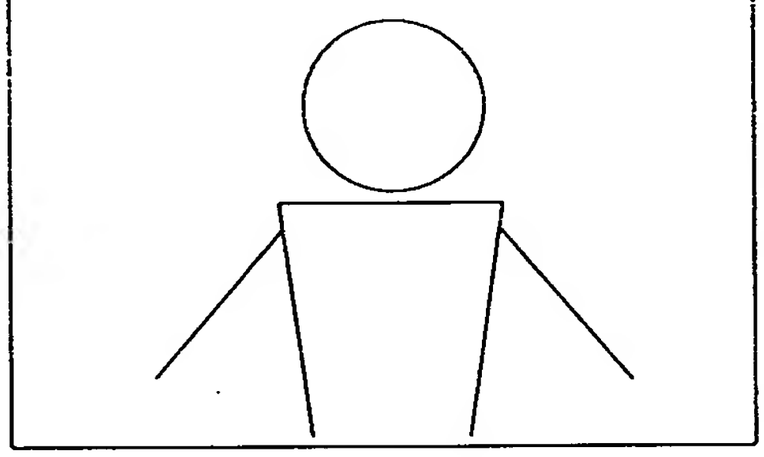
MEDICAL CONSULTATION SCREEN
(DOCTOR SIDE)

Doctor ID XXXX
Doctor name XXXX

Patient ID XXXX
Patient name XXXX

Notice of entrance

Patient video



Patient's file

Sensor display

Body temperature	XX°C
Pulse	XX
Blood pressure	XX-XX
SpO_2	XX

Auto Manual

X year X month X day

Nth consultation room reception data

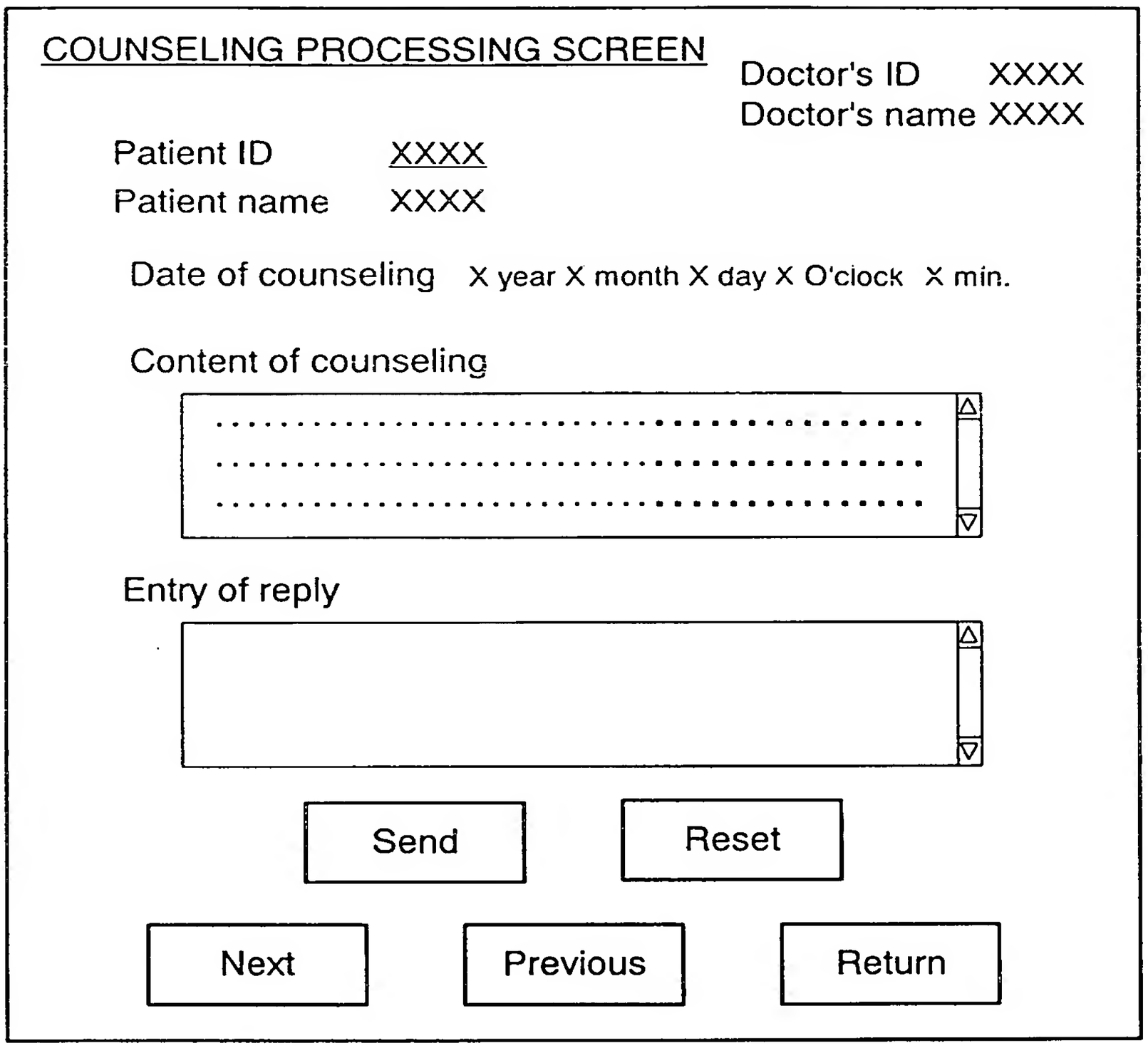
No.	Patient ID	Patient name	Received at	Classification		Status
				Visit	At-home	
1	XXXX	XXXX	XX:XX	O		Finished (at XX:XX)
2	XXXX	XXXX	XX:XX		O	Finished (at XX:XX)
3	XXXX	XXXX	XX:XX	O		Under consultation
4	XXXX	XXXX	XX:XX	O		
5	XXXX	XXXX	XX:XX		O	

Terminate medical consultation

Write into the file

Return

Fig. 45


COUNSELING PROCESSING SCREEN
Doctor's ID XXXX
Doctor's name XXXX
Patient ID XXXX
Patient name XXXX
Date of counseling X year X month X day X O'clock X min.
Content of counseling
Entry of reply
Send
Reset
Next
Previous
Return

10/552781

Fig. 46

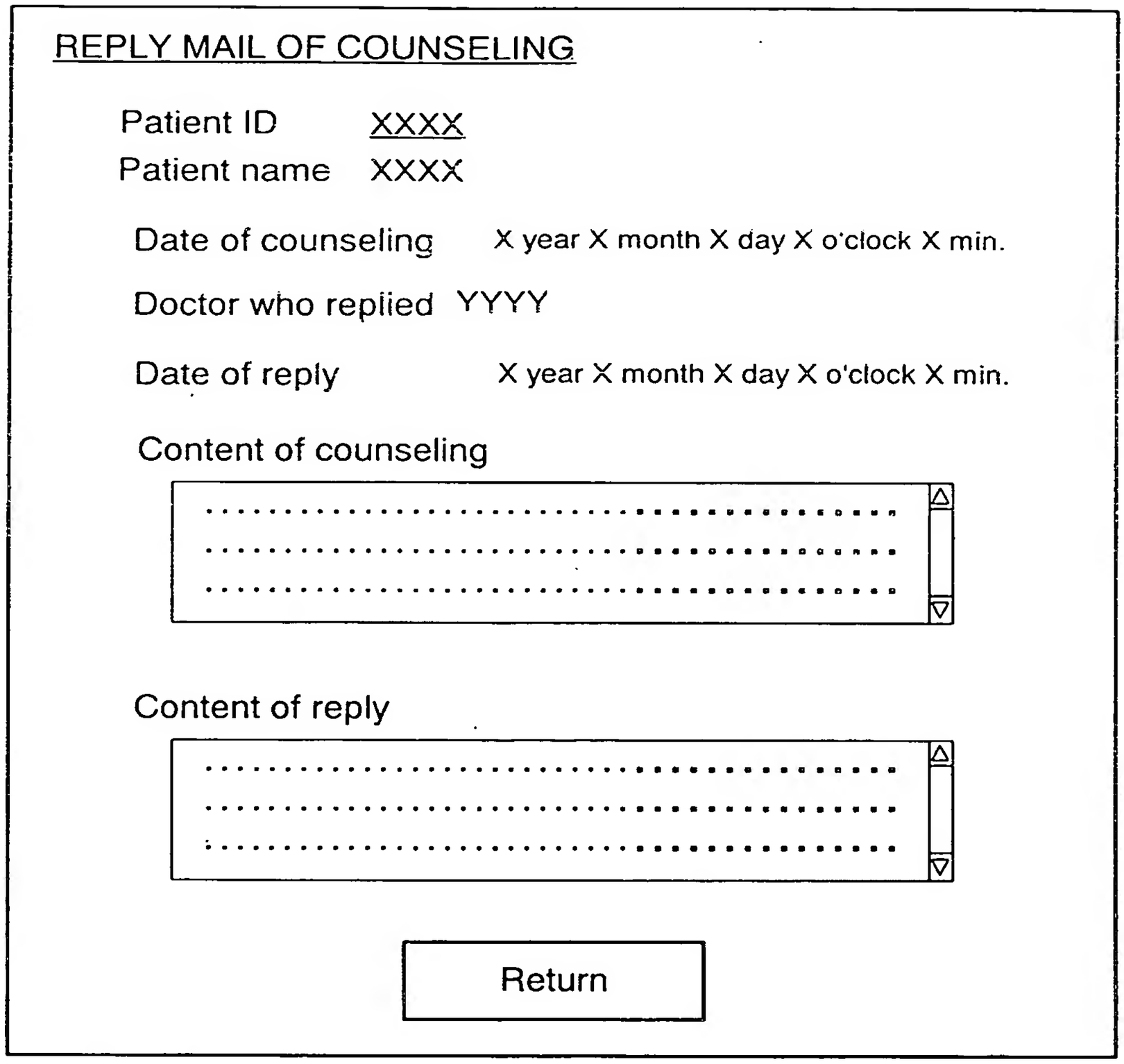


Fig. 47

MEDICATION PROCESSING SCREEN

Doctor ID XXXX
Doctor name XXXX

X year X month X day Medication reception data

No.	Patient ID	Patient name	Received at	Classification		Status
				Visit	At-home	
1	XXXX	XXXX	XX:XX	O		Finished (at XX:XX)
2	XXXX	XXXX	XX:XX		O	Finished (at XX:XX)
3	XXXX	XXXX	XX:XX	O		
4	XXXX	XXXX	XX:XX	O		
5	XXXX	XXXX	XX:XX		O	

Entry of doctor's comment

Permit | Not permit | Return